BRITISH COLUMBIA SECONDARY STUDENTS: LIFESTYLE AND DRIVING SURVEY

BY

J. PETER ROTHE

Manager, Research and Evaluation

Traffic Safety Planning and Research Department

Insurance Corporation of British Columbia
151 West Esplanade, North Vancouver, B.C., V7M 3H9

July, 1986

Canadian Cataloguing in Publication Data

Rothe, John Peter, 1948–
British Columbia secondary students

Bibliography: p.
ISBN 0-7726-0513-0

1. Juvenile automobile drivers – British Columbia – Attitudes. 2. High school students – British Columbia – Attitudes. 3. High school students – British Columbia – Conduct of life. 4. Automobile driving – British Columbia. I. Insurance Corporation of British Columbia. II. Title.

HE5620.J8R67 1986 629.28'3'09711 C86-092130-1

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Printed in Canada

ACKNOWLEDGEMENTS

A survey of this size cannot be accomplished without the professional input of numerous individuals. For this project, special acknowledgements are extended to Ken Stoddart, Peter Cooper, Sylvia Fockler and Mario Pinili.

Sincere thanks are also extended to the administrators and teachers in the following school districts: Cranbrook (Number Two), Central Okanagan (Number Twenty-Three), Chilliwack (Number Thirty-Three), West Vancouver (Number Forty-Five), Howe Sound (Number Forty-Eight), Prince George (Number Fifty-Seven), Sooke (Number Sixty-Two), Gulf Islands (Number Sixty-Four) and Courtenay (Number Seventy-One). Without the cooperation of these people, the survey could not have been completed.

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INTRODUCTION

The Insurance Corporation of British Columbia chose "Young Drivers" as a major focus for the 1985 research agenda of the Traffic Safety Planning and Research Department. The goal was to gather data on social, cultural and existential variables that influence young drivers in British Columbia. To achieve this goal a young driver research design was developed. It included in-depth interviews with young drivers who were involved in injury-producing car crashes, group interviews with grade ten, eleven and twelve students in selected British Columbia secondary schools, face-to-face interviews with teachers, driving school instructors, British Columbia Motor Vehicle Department examiners and students' parents, and completion of questionnaires by samples of grade ten, eleven and twelve licensed and unlicensed British Columbia students.

This document addresses only the methodology and findings of the senior secondary school survey. It is anticipated that the results will be used for future development of young driver-relevant social intervention programs. The other components of the Young Driver research design are fully described in separate reports. A monograph linking the various components will be published in the near future.

YOUNG DRIVERS: LITERATURE REVIEW

The purpose of this review is to provide an overview of the state of knowledge regarding young drivers and traffic safety and to indicate relevant variables which arise from previous research. Most of the materials reviewed were based on research projects.

The research projects reviewed were based on four methodological strategies: 1) analysis of aggregate data such as moving violations, crashes, drivers' licenses and vehicle registrations (e.g. U.S. Fatal Accident Reporting System, FARS), 2) analysis of self-reporting questionnaires, 3) analysis of interviews and/or observations, and 4) conceptual analysis of young drivers.

AGGREGATE DATA ANALYSIS

Karpf and Williams (1982) analyzed information on fatal passenger vehicle crashes obtained from the Fatal Accident Reporting System (FARS) for the year 1978. The data for FARS were collected by the state governments under contract to the National Highway Traffic Safety Administration.

In 1978, the data consisted of 15,077 fatal single-passenger vehicle crashes resulting in 16,712 deaths, and 9,191 two-passenger vehicle crashes that resulted in 11,574 deaths. The teenager-involved deaths represented 81% of all passenger vehicle occupant deaths in 1978.

Karpf and Williams devised a code composed of 33 driver actions and 9 driver conditions that contributed to the crash. If any of the 42 was attributed to a teenaged driver, the driver was considered responsible.

In two-vehicle crashes, the most often cited driver faults were:

1. failure to keep in proper lane, running off the road
2. failure to yield the right of way
3. speeding
4. driving on the wrong side of the road
5. reckless driving (negligence, erratic driving)
6. failure to obey traffic signs
7. inattentiveness

It was concluded that teenagers were responsible for 75% of all the vehicle crashes studied (Karpf & Williams, 1983). Overall, teenage drivers were five times more responsible for fatal crashes per license holder due to the fact that teenagers carry more passengers than any other group. Also, based on the analysis, Karpf and Williams concluded that male teenagers were more likely to be aggressive drivers, to drive after drinking and were less likely to wear seat belts.

The finding that young drivers were over-involved in traffic accidents was supported by Stewart and Sanderson (1984). Their calculation of accident rates, using aggregate data, showed that the relative risk of a casualty accident is highest for drivers aged 16-19 (Jonah, 1984).

Harrington and McBride (in OECD, 1975) analyzed 7,500 teenage driver records in California and then compared their violations per 100 million miles with other age groups. Their findings were:

1. drivers under 21 years had higher violation rates for:
   (a) speed
   (b) equipment
   (c) disobeying signs
   (d) passing, turning and right-of-way.

The OECD (1975), Harrington (1973), Fell (in OECD, 1975), Mercer (1983), Goldstein (1973) and Williams (1984) concurred that:

1. Those below 25 years of age contribute disproportionately to accidents.
2. Those below 25 are over-involved in nighttime accidents per 100,00 miles.
3. Under 25 year-old males had a considerably higher rate of accident involvement than females.
4. 16 to 19 year-old males had highest crash rates per mile.
5. Those below 25 were over-involved in drinking related accidents.

Read and Dubreuil (1984) analyzed all motor vehicle fatalities involving teenagers in Alberta from 1978 to 1982. Their major findings were:

1. 66% of the drivers killed were male.
2. 47% of the female passengers killed were between the ages 14 to 16 years.
3. 81% of the fatal crashes occurred in rural areas – towns with a population of approximately 10,000.
4. 35% of the drivers consumed alcohol.
5. Highest at-risk males were the 19 year olds.
6. Highest at-risk females were the 16 year olds.

Using data from the U.S. Fatal Accident Reporting System (FARS), the editors of Mortality and Weekly Report (1983) gave figures on the involvement of young drivers involved in fatal motor vehicle accidents. Young drivers comprised one-third of the drivers involved in 56,910 fatal accidents; of these, 34% were under 24 years and 13% between 15-19 years. Of the 101,702 drivers, passengers and pedestrians involved in fatal accidents in 1982, 43% died. Police records showed that 36%

of the deaths occurred in motor vehicle accidents where at least one driver had been drinking. Data show that the blood alcohol concentration (BAC) of the young drivers involved in fatal MVA's was lower than that of older drivers in the same situation and yet a greater percentage of young drivers were involved in fatal crashes. This could be explained by the young driver's inability to tolerate alcohol and his/her lack of driving experience.

The finding that young drivers were over-represented in alcohol-related accidents was announced by Preusser, Oates and Orban (in OECD, 1975), Mercer (1983), Hurst (in OECD, 1975) and others. Collectively, these studies have systematically analyzed data from the United States, Canada and Europe. The OECD (1975) explains this over-representation as reflecting the following factors:

1. EXPERIENCE. Young people are just learning to use alcohol and thus are less able to cope with emergencies which result from alcohol use and driving.
2. MULTIPLE DRUG USE. Young people are more likely to be multiple drug users, compounding any difficulties with driving.
3. EMOTIONS. Young people are facing a period of emotional milestones such as graduation, college, marriage, lost love, etc.

According to Pelz and Schuman (in OECD, 1975), the emotional milestones cause considerable stress for young people whose personalities and ability to cope with stress are still maturing.

Kraus et al. (in OECD, 1975) compared data on background characteristics of 205 young drivers under age 21 who had recently had accidents, with a control group of 205 individuals matching age, date of license and size of community. Their findings showed significant differences as illustrated below:

	Percent of Group who had the Characteristics	
	Control	Accident
1. Failed one or more grades in or before Grade 8.	17%	30%
2. Last high school course was vocational or occupational.	7%	18%
3. Either 1 or 2 above.	20%	39%
4. Became a regular cigarette smoker at or before age 16.	27%	39%

	Percent of Group who had the Characteristics	
	Control	Accident
5. First full-time employment, exclusive of school vacation, at or before 17 and before driving license.	4%	14%
6. Had been charged with a criminal offense, exclusive of those related to driving.	2%	14%

Klein (1972) reviewed driving records, grade levels and police records of 8,094 licensed male undergraduate students enrolled in large state universities. He began with the assumption that attitudes and habitual responses are developed through the family and the institution. According to Klein, the family life-style influences a young person's perception of people and situations, and how he behaves towards them. The institutional value system is enforced through the courts, police and schools.

Klein established these hypotheses:

1. Young male drivers with records of numerous convictions and crashes will have fathers with numerous convictions and crashes.
2. Young male drivers with records of numerous convictions and crashes will also be delinquent in other matters such as use of alcohol, academics and contact with the police.
3. Young drivers with delinquent familial socialization and who are receptive to institutional socialization, generally experience a lower conviction frequency than that of young drivers with delinquent familial socialization who remain immune to institutional socialization.

Klein's analysis produced the following findings:

1. The strongest relationships were between father's and son's convictions. Sons of fathers with convictions have 19 more convictions per individual than sons of fathers with no convictions. This confirms the hypothesis concerning the influence of familial socialization.
2. Students from broken homes experience more convictions.
3. Overall students with grade point averages higher than 2.6 have 0.15 fewer convictions than students with grade point averages of 2.6 or lower.

4. Sons of fathers with convictions have lower grade point averages than sons of fathers with no convictions. This is understood to imply that fathers with convictions socialize their sons with delinquent norms.
5. Deviation from a level of academic performance, as indicated when grade point averages are compared to achievement tests administered upon entry to university, evidenced a higher conviction rate for those individuals achieving below their level of ability.
6. Students with the greater number of convictions generally exhibited other delinquent behavior.
7. No relationship was found between student's crashes and father's crashes.
8. Previous convictions are a form of behaviour associated with crashes.

Klein (1972) concluded that delinquent familial socialization is a major factor in traffic convictions of young drivers. The crucial variable associated with violations is the socioeconomic status.

Although Klein's study moves into the person's psychological domain, it does not attempt to allow for other socialization factors such as peer pressure or the influence of the media. Klein's variables, although useful for further study, are limited within the parameters of his research design. Unfortunately, many such findings are based entirely on statistical data supplied by central agencies (police forces or motor vehicle departments, for example). As Goldstein (1973:45) suggested:

> It appears that some of the characteristics of their driving behaviour are symptoms of their problems as human beings at a particular stage of development, in a particular culture. These are young people with personal, social, developmental, economic, educational and other problems, who are learning to drive and cope with traffic during a time of life that is characterized by stress, strain and turbulence.

The use of accident data of this nature has built-in weaknesses, such as:

1. Expressing accidents as rare events per unit of exposure, using units like years driven or miles travelled per driver.
2. Recording procedures which allow for only single causation factors instead of multiple causation factors.
3. Accidents are reconstructed events which are in turn reconstructed by different investigating officers.

According to Klein (1972), teenagers are a labelled or "red-flagged" group for police attention and, subsequently, the use of violations as a means of accurate analysis is predicated by subjective interpretations. For example, Heustenstamm (in Klein, 1972) selected 15 adolescents with previously exemplary driving records, pasted Black Panther bumper stickers to their personal vehicles, and within 17 days a total of 38 citations was received. This illustrates to some extent, the subjective nature and influence of specific cues upon the decisions made regarding driving infractions.

To overcome such weaknesses, Schuster (1966) used driving records along with biographical data on California and Iowa drivers aged 17 to 18 years. The biographical information was received from 2,500 high school and junior college students through the Driver Aptitude Test. Based on his analysis and review of the literature, Schuster defined the following characteristics as typical of the young problem driver:

1. Personality pattern of psychological immaturity, evidenced in aggression and lack of emotional control.
2. Inexperience in avoiding accidents.
3. Inexperience in controlling drinking and driving.
4. Better psycho-physical characteristics such as vision and reaction time than older drivers.

Through factor analysis, Schuster established the following factors as important predictors of young driver accidents:

1. car ownership
2. annual mileage
3. sex
4. working part-time

Waller (1970) analyzed data gathered by the North Carolina Highway Patrol and responses on 956 questionnaires mailed to randomly selected young drivers. The findings were:

1. Of all the accidents reported, 50% involved at least one driver 25 years or under and, of these, 34% were single vehicle accidents.
2. Younger drivers in accidents tended to be in the tenth or eleventh grade.
3. Young females tended to be better educated than young males.
4. For the 18-20 year olds, the drivers in accidents were somewhat more likely to have mothers who were not working, than was true for the 16-17 year olds.
5. Young drivers in accidents in North Carolina tended to come from approximately the same level of socioeconomic backgrounds.

6. Young male drivers were more likely to drive alone than young females.
7. Young drivers were more likely to become involved in accidents during pleasure trips than older (over 28) drivers.
8. For young females, their purpose for trips was more likely to be errands than pleasure trips.

Overall, Waller concluded that young drivers in accidents were likely to be single, and were more likely to have fathers in higher levels of occupations (professional, semi-professional, technical or managerial) and mothers who worked. As for accident-attributing factors, respondents indicated that the automobile was least likely to be blamed for a crash.

SURVEY RESEARCH

A majority of the findings related to psychological and sociological variables were the results of broad surveys. The more relevant of these have been described in the section below.

Most of the survey is based on psychological and/or sociological assumptions concerning adolescence and traffic. For example, Loitzl (1965) described adolescents in road traffic as a psychiatric-psychological problem. According to Loitzl, adolescents are characterized by increased activity and a desire for self-assertion, by adventurousness and hunger for excitement. As Loitzl explained:

> The greater readiness to run risks, frequently combined with an insufficient appreciation of the limits of one's abilities; impulsiveness; excessive drive and lack of concentration combined with insufficient maturity of judgment and an underdeveloped sense of responsibility; a lack of circumspection and of the ability to appreciate realistically the behavior of other road users; all these factors may have disastrous consequences in road traffic (p. 253).

Levonian (1969) began his research based on the assumption that little is known of sociological, psychological and physiological functions which influence driving. Consequently, he surveyed 1,080 Los Angeles driver education students based on the following personality measures:

1. determination (oriented towards a goal)
2. adaptiveness (oriented towards adjustment of situations)
3. defensiveness (oriented towards defense of the ego)
4. ambivalence (oriented towards indecision in conflict situations)
5. expediency (oriented towards self-benefit at the expense of others)

Levonian compared the scores of the tests with students' violations and crashes. His findings were that expediency (oriented towards self-benefit at the expense of others) was positively related to accidents. Also, violation groups differed with respect to expediency. There was a positive correlation between number of violations and members' expediency ratings. Levonian hinted that violations and crashes may be linked to anti-social behavior by way of expediency.

In 1984, Williams, Lund and Preusser surveyed 46,906 students attending 75 high schools in areas of seven different American states. The areas were selected to reflect variation in initial licensure, population density, socioeconomic standing, and lifestyle.

Williams et al. learned that 38% of high school students in Mississippi, Colorado and Louisiana who only had learners' permits drove alone up to 10 miles a week. This was against the law. Furthermore, 56% of the students answered that they owned cars, while 71% of those not owning cars could get one when they needed it. Thirty-three percent of the students drove to school, with males driving more than females.

After the first six months of licensure 20% of the males were ticketed. This rate increased to 25% after the end of the first year. Forty percent of both males and females who had their license for two years had one or more accidents. Thirty-three percent drove faster than 70 mph at least once a week or more.

Williams et al. also established that those students with higher grades were more likely to drive to school. However, lower grades were associated with owning a car, high weekly mileage, self-reported occurrences of speeding, driving after drinking and having traffic tickets or crashes. Of particular interest is that 89% of students agreed with the item, "Having my car is very important to me" and 75% agreed with, "Teenagers who get their own car will probably spend less time on school work."

Although the Williams et al. findings are relevant, much definition of key ideas or concepts was missing. For example, they did not specify poor grades or high grades. Nor did they describe the respondents' immediate school contexts or academic reputations.

Schuman, Pelz and Ehrlich (1981) sampled 288 respondents to establish emotional factors relevant to young drivers. Of the 16 to 18 year olds, 50% reported "dare-devil" tactics like racing and dares. Twice as many 16-18 year olds took "more chances often" with one or more friends during the past month compared with 23-24 year olds. Forty percent of the 16-20 year olds "blew off steam" in a car because of arguments with family members or girl friends or because of financial problems. As age increases, the anxiety about driving decreases and driving confidence increases.

Schuman et al. believed that teenage accident factors are:

1. exposure on the road
2. motivation for driving
3. ownership of own car
4. employment rather than school attendance.

Schuman believed that based on his research, the future orientation of young people is linked with more cautious use of the automobile. Of particular interest is that young people studying to attend college or university have a better driving record than young people working.

Bloomfield (1984) surveyed Washington State teenage drivers who had completed a traffic safety education course and had held a driver license for 18 to 24 months. Exact numbers were not provided. A major finding was that teenagers looked forward to the time they could drive on the highways. In addition, teenagers felt that the license meant freedom and mobility to work, to participate in after-school athletics and activities and to reduce their reliance on parents for being chauffeured around.

Asher and Dodson (1970) selected a sample of 799 students who had participated in Project TALANT, a project conducted by Flanagan et al. (1964). About 400,000 high school students underwent a two-day period of paper and pencil testing in the spring of 1960. As with Bloomfield (1984), the response to the item "Did you take driver training at school?" was of particular interest. Overall, 102 variables were selected for the study. The criterion variable was: no accident-accident. According to Asher and Dodson, the major determinants of accidents are having a car available, learning to drive at younger ages, times per week driving, number of cars in the family and the subject owning a car. In conclusion, the authors outlined that in well controlled studies of driver education and traffic accidents there is zero correlation. Therefore, driver training is of negligible value in reducing accidents.

The emphasis on psychological and sociological variables related to young drivers is also featured in interview studies. They are defined in the following section.

INTERVIEW RESEARCH

Schuman and Pelz (1972) interviewed 1,672 young males and 483 young females who were linked to violations and accidents. The analysis showed the following variables related to 16-24 year old accidents and violations (p less than or equal to .01).

1. drives after drinking
2. speeds on open highway

3. speeds inside city
4. has driven a motorcycle
5. more than 10 hours per week in cars for fun
6. feels adult pressures
7. driving is affected by passengers
8. drives to blow off steam after argument
9. fist fight in past year
10. one or more violations last year
11. one or more accidents last year
12. drinks
13. two or more near accidents last year

Previously, in 1968, Pelz and Schuman (in OECD, 1975) found by interviewing 452 16-19 year olds that "dangerous drivers":

1. give more attention to their vehicle
2. drive more than 20 hours a week for fun
3. regard the vehicle as an essential factor in their lives.

Also, the number of traffic violations showed a linear increase with the time spent on the care of the vehicle (e.g. repair, cleaning, etc.). The "dangerous drivers" did not neglect their vehicle more than safe drivers. On the contrary, Pelz and Schuman indicated that in most cases the "dangerous drivers" owned a vehicle of their own and accordingly their emotional relationship to it was much stronger. The authors concluded that the adolescents' higher accident rate and the number of traffic violations is not considered due primarily to neglect of a vehicle.

Harrington (1972) used a 40 item questionnaire and one hour interviews with 16-17 year old licensees in five California counties. Based on the analysis of both data sources, Harrington summarized the key variables as relevant indicators of young driver accident subjects. Worse accident records were positively correlated with:

1. poor citizenship grade (teacher rating of work habits)
2. lower grade point average
3. absenteeism
4. drove more miles
5. drove newer cars
6. drove cars with more mileage on them
7. completed less education
8. had lower occupational goals
9. smoked more
10. drank more
11. had more part-time jobs

According to Harrington (1972) the variables that often entered into the safe driving equation were smoking and citizenship grade. Overall, the more schooling the less accidents; the better the grades the less accidents. In the reverse, the greater school drop out, the more accidents and the worse the grades, the more likelihood of accidents.

Firth and Goffery (1980) elicited qualitative data relating to attitudes about road safety. After holding small group discussions with 70 young people outside London, Ontario, the authors interpreted student answers as:

1. All 16-17 year olds wanted to own a car. Cars represent increased status in relation to the opposite sex. Almost all respondents eligible to drive a car were doing so or were saving up to do so.
2. Young driver road behavior is adequate in most situations.
3. Spur of the moment decisions influenced by individuals' prevailing moods and preconceived calculated risks based on group pressure led to accidents. The latter was the main instigator of risk taking.
4. There was a tendency to blame "the other party" for accidents, and reluctance to accept ones own behaviour as the most important contributing factor leading to accidents.
5. Feelings of hopelessness, acceptance and inevitability were frequently expressed by respondents when considering road accidents. Peer group influence, potential for ridicule and having to defend personal decisions decreased safety.
6. As a countermeasure for increased safety, there was a call for more effective legislation, compulsory driver training and loss of driver license rather than a stiff fine.

Carlson and Klein (1970) found a clear correlation between the delinquency of a son and that of the father whose delinquency is a characteristic of a broken home. Rommel (in OECD, 1975), interviewing a sample of students in California, was able to show that high school pupils with three or more accidents, when compared with others having no accidents, were more likely to have friends that their parents did not like, and more often wished to leave home.

Quenault (1968) investigated driving behaviour, reaction time and attitudes of two different age groups: one consisting of 20 persons between 17 and 20 years of age and the other of 20 persons between 60 and 70. The researcher found the following attitudes:

1. the young group seemed to obtain greater pleasure from driving, though they felt more frustrated by the traffic situation.
2. the young drivers gained more pleasure from overtaking and appeared to be more competitive.
3. the young drivers tended to think that accidents were inevitable and caused by road conditions.

4. the young drivers admitted making mistakes and showing lapses in driving behaviour.
5. the young drivers had shorter reaction times.

Although Quenault's findings concerning the young driver seem parallel to other findings, to compare the young driver with 60 to 70 year olds seems odd, to say the least. Perhaps, the relevance of a comparison would have been increased if the contrasting group was 25 to 40 year olds, for example.

CONCEPT ANALYSIS

Dunn (1972) examined the young driver through the eyes of a young driver. He explained that many mistakes teenagers make are made during learning. Although their muscular coordination, learning ability and psycho-motor skills are at their peak, nevertheless, young drivers are over-represented as cause agents in car crashes. According to Dunn, many mistakes are made while learning, therefore accidents should be expected.

To Dunn, a greater concern is how to deal with the teenager's view that driving is a right, not a privilege, and that driving a car are symbols of equality with adults. In youth culture risk-taking is admired. Peers encourage a person who strikes out at the system that keeps teenagers from being granted adult status. Risk-taking on the road is considered one such striking out strategy.

Fielding (1972), a psychiatrist, agreed with Dunn, indicating that to the teenager the car is a symbol of independence, sexual potency and aggression. Cars boost masculinity and are a common venue for sexual experimentation. According to Fielding, the young female's admiration or condemnation of a young male driver is an important determinant of driving behaviour. To young girls, a boyfriend who drives a fast car is an accessory to prove to her and to others that she is a woman, rather than a girl.

Overall, Fielding, with the support of Loitzl (1965), described that the young person has a lower frustration tolerance and less ability to control the expression of aggression. He tends to remove the anger away from others, towards the self, making it more dangerous for other drivers.

Klein (1972) took a more sociological stance on the young driver. He outlined, as did Dunn (1972), that certain numbers of crashes are learning errors. Substandard performance is always evident in the early stages of a learning process. With the increase of suburbanization, young people need a car for part-time jobs and extracurricular activities that do not coincide with the school bus schedule. Young people need this to attain an adequate social life with peers.

According to Klein, the essential research question tends to be, "Why don't adolescents drive like adults?" Yet, efforts to modify young people's driving in the direction of the adult model necessarily involve persuading them to deviate from their own group norms. As such, adolescents have minority status. They have increasingly become labelled, but adults have not attempted to modify the conditions influencing the young drivers.

SUMMARY OF RELEVANT FINDINGS

To date, most of the research on young drivers has been done outside British Columbia. Some findings, therefore, tend to lack relevance to British Columbia's social and environmental context.

Overall, the research studies investigated a variety of factors related to young driver risk-taking, general driving behaviour and accident involvement. The following summary of findings illustrates these factors:

1. Young Driver Faults Producing Crashes:
    - 1.1 failure to keep in proper lane, running off the road
    - 1.2 failure to yield right-of-way
    - 1.3 speeding
    - 1.4 driving on the wrong side of the road
    - 1.5 failure to obey traffic signs
    - 1.6 reckless driving (negligence, erratic driving)
    - 1.7 inattentiveness
    - 1.8 overtaking
    - 1.9 being fatigued
    - 1.10 poor equipment
2. Young Driver Logistics and Risks:
    - 2.1 16 year olds have highest crash rate per mile
    - 2.2 under 25 year old males have higher accident involvement than females
    - 2.3 under 25 over-involved in nighttime accidents
    - 2.4 highest at risk: 19 year old males
    - 2.5 highest at risk: 16 year old females
    - 2.6 majority of accidents are single car crashes
    - 2.7 Grade 10 and 11 students are most likely to be in car crashes

3. Young Driver Roadway Exposure:

   3.1 under 20 year olds drive more miles per week
   3.2 under 20 year olds drive more during weekends
   3.3 under 20 year olds drive more during weekends (midnight to 4 a.m.)

4. Young Drivers and Drinking/Driving:

   4.1 large percentage of young drivers in accidents had blood alcohol content
   4.2 much drinking in schools also involves multiple drug use
   4.3 young drivers are over-represented in alcohol-related accidents
   4.4 young drivers lack the driving experience to cope with alcohol-related emergencies
   4.5 young drivers have not yet gained much experience with alcohol use in their teenage years

5. Academic Factors and Young Driver Driving Behaviour:

   5.1 school failure (subject or grade) is a characteristic of accident involvement
   5.2 the likelihood of taking vocational/occupation courses rather than academic courses is related to accident involvement
   5.3 students deviating from academic potential based on their score on achievement tests increased chances of traffic violations
   5.4 young females in crashes tended to be better educated and have better marks than young males
   5.5 lower grades are associated with owning cars
   5.6 lower grades are associated with high weekly driving mileage
   5.7 lower grades are associated with self-reported occurrences of speeding
   5.8 lower grades are associated with driving after drinking
   5.9 car ownership relates to less time on school work
   5.10 students preparing for university or college have better driving records than those working
   5.11 formal driver training has limited or no value in reducing accidents
   5.12 school absenteeism is related to poor accident record
   5.13 completing less education is related to poor accident record
   5.14 part-time jobs are related to poor accident record
   5.15 school drop-out is related to poor accident record

6. Family Factors and Young Driver Driving Behaviour:

   6.1 students from broken homes have increased convictions
   6.2 sons of fathers with convictions have more traffic convictions
   6.3 young drivers in accidents are more likely to have fathers in higher levels of occupations (e.g. professional, semi-professional, technical or managerial)
   6.4 young drivers in accidents are more likely to have mothers who work

7. The Automobile and its Relationship to Young Drivers:

   7.1 cars are a symbol of independence for teenagers
   7.2 cars are teenagers' symbol of equality with adults
   7.3 cars represent increased status in relation to the opposite sex
   7.4 greater risk-taking drivers give more attention to their vehicle
   7.5 greater risk-taking drivers own a vehicle
   7.6 availability of a car is a major determinant of accidents
   7.7 owning a car is important to students
   7.8 owning a car is associated with lower grades
   7.9 the automobile is seldom blamed by students as being responsible for crashes
   7.10 the automobile may be label for increased police surveillance
   7.11 the automobile is most likely to be used for pleasure trips resulting in accidents

8. The Driver License and Young Drivers:

   8.1 lack of young driver training for driving in hazardous conditions
   8.2 lack of testing for driving in hazardous conditions
   8.3 after licensure the rate of males getting tickets increases up to a year
   8.4 after two years of licensure, many students have accidents
   8.5 license means freedom and mobility to work, to young drivers
   8.6 license means participating in after school activities
   8.7 license means reducing reliance on parents for being chauffeured where no buses exist

9. Emotional Characteristics Influencing Young Driver Driving Behaviours:

   9.1 emotional milestones create stress for which the car is a release
   9.2 lack of control of emotions and aggressiveness while driving

9.3 readiness to take risks while driving
9.4 under-developed sense of responsibility
9.5 orientation towards self-benefit at the expense of others
9.6 tendency to blow off steam in a car because of problems
9.7 as the age increases, the driving anxiety decreases
9.8 as the age increases, the driving confidence increases
9.9 passengers affect the young driver's driving
9.10 group pressure is a main instigator of risk taking
9.11 lack of emotional control is typical of young driver
9.12 strong emotional relationship to their cars
9.13 feel more frustrated by traffic situations

10. Emotional Behaviour Influencing Young Driver Driving Behaviours:

10.1 regular cigarette smoking at or before 16 is related to accident
10.2 convictions are associated with crashes
10.3 hunger for excitement
10.4 desire for self-assertion
10.5 does not appreciate behaviour of other road users
10.6 lack of responsibility for others
10.7 self-benefit at the expense of others
10.8 daredevil tactics like racing and dares
10.9 blows off steam in a car
10.10 if male, has had a fist fight in previous year
10.11 has poor working habits in school
10.12 highly motivated to drive
10.13 more competitive
10.14 less ability to control the expression of aggression
10.15 internalizes anger

11. Community Factors Related to Young Drivers:

11.1 lack of meaningful weekend activities for young
11.2 as a minority they are labelled by police for violations
11.3 as a group they are involved in a learning process where substandard performance is a reality
11.4 young driver feels mature but is treated as a child
11.5 media affects young persons' activities (car as sex object, drinking and driving)
11.6 the notion that driving is a right not a privilege resulting in abuses

STATEMENT OF THE PROBLEM

A thorough review of the literature on young drivers and forty group interviews with British Columbia teenagers became the basis for the conceptual thrust of the questionnaire survey. It became evident that more British Columbia-relevant data on the behavioural and social/societal variables related to young drivers are required for development of meaningful educational programs. Thorough descriptions of present and future young drivers' social/behavioural characteristics provide the basis for program development designed to be relevant to young drivers' immediate life events. To enhance the data gathering process the following list of questions was developed:

1. How do grade ten, eleven and twelve licensed and unlicensed students compare with respect to such lifestyle activities as partying, visiting, dating, staying at home and going out?
2. How do grade ten, eleven and twelve licensed and unlicensed students compare in their attitudes towards driving, peer group influence, risk-taking, parent responsibilities, and various legalities?
3. How do students generally assess safe driving behaviour?
4. To what extent do licensed students engage in unsafe driving practises?
5. To what extent do licensed students engage in certain everyday driving behaviours?
6. What do grade ten, eleven and twelve licensed and unlicensed students generally do on weekends?
7. What expectations do students have of receiving a drivers licence? How do the expectations compare to the realities of students who already have a license?
8. What factors do students consider relevant for possessing an ideal car?

METHODOLOGY

To obtain reliable and valid information about a large sample of British Columbia senior secondary students, (drivers and non-drivers,) a mail out questionnaire was employed. This section describes survey techniques such as sampling, instrumentation and data collection.

POPULATION AND SAMPLE

The criteria for sampling were as follows:

1. full-time students attending grades ten, eleven or twelve;
2. geographic representation of north, south, east and west British Columbia schools;
3. rural, suburban, urban representation;
4. Vancouver Island - Lower Mainland representation.

The school districts which reflected the sampling plan were, School Districts; No. 23 (Central Okanagan), No. 2 (Cranbrook), No. 33 (Chilliwack), No. 71 (Courtenay), No. 64 (Gulf Islands), No. 57 (Prince George), No. 62 (Sooke), No. 48 (Howe Sound), and No. 45 (West Vancouver).

Table 1 illustrates the responses by school districts.

Table 1
Responses By School District

SCHOOL DISTRICTS		NO. OF RETURNS*	% OF TOTAL
Central Okanagan	(#23)	225	16.5
Howe Sound	(#48)	207	15.1
West Vancouver	(#45)	201	14.7
Chilliwack	(#33)	169	12.4
Sooke	(#62)	147	10.7
Cranbrook	(# 2)	141	10.3
Gulf Islands	(#64)	116	8.5
Courtenay	(#71)	85	6.2
Prince George	(#57)	77	5.6
	Total	1,368	100 %

* Number of Missing Observations (Codes Removed) = 8

Table 2 displays the responses by grades.

Table 2
Responses By Grade

GRADES	NO. OF RETURNS*	% OF TOTAL
Ten	475	37.7
Eleven	406	32.3
Twelve	378	30.0
Total	1,259	100 %

* Number of Missing Observations (Grades Not Identified By Students) = 117

Table 3 outlines the responses by gender.

Table 3
Responses By Gender

SEX	NO. OF RETURNS*	% OF TOTAL
Female	726	53.0
Male	643	47.0
Total	1,369	100 %

* Number of Missing Observations (Sex Not Identified By Students) = 7

A breakdown of responses by licensed/unlicensed students is shown in Table 4.

Table 4
Licensed/Unlicensed Student Respondent Breakdown

CATEGORY	NO. OF RETURNS*	% OF TOTAL
Not licensed and not in possession of learner's permit	492	35.9
Not licensed but in possession of learner's permit	217	15.9
Licensed	660	48.2
Total	1,369	100 %

* Number of Missing Observations = 7

In total, 1,376 questionnaires were completed and returned.

DATA COLLECTION

Permission to distribute the survey in specific secondary schools was obtained from the district superintendents of schools or representatives of their office. Once senior adminstrators formally supported the study, further permission for questionnaire distribution was received from school principals.

To help expedite the survey, parcels were packaged and couriered to each school. Each box contained a specific number of questionnaires by grade, a covering letter to the principal of each school and a letter of instruction which clarified the procedures for the dissemination, administration and return of the questionnaires. The student questionnaires were distributed as grade ten, eleven and twelve class sets on May 24, 1985. An administrator of either the school district and/or secondary school randomly selected the grades in which the questionnaires were distributed. Time allotted for completion was during the students' home room classes. The questionnaires were returned by June 27th, 1985.

Each participating school district was assured of a statistical breakdown concerning their particular school, and a copy of the final report. Throughout the research process, all respondents were assured of complete anonymity and confidentiality.

INSTRUMENTATION

The questionnaire used in this study was constructed by Dr. Ken Stoddart, a University of British Columbia sociology professor, with the help of the Traffic Safety Planning and Research Department's professional staff. The questionnaire used Standard Likert Scale and Semantic Differential formats to examine the attitudes and reported behaviours of students.

Items on the questionnaire were based on findings from extensive interviews with students held in three British Columbia secondary schools (Hope, Burnaby and Port Alberni/See separate report) and a review of young driver-related literature.

In short, the questionnaire consisted of the following eight sections (129 items):

Part I, titled **TELL US SOMETHING ABOUT YOURSELF**, sought general demographic information and information on car ownership and licensure.

Part II, titled **HOW DO YOU FEEL ABOUT THESE STATEMENTS?**, probed student feelings on a variety of motoring-related issues, sought information on lifestyles, and attempted to establish driving patterns.

Part III, titled **HOW DO YOU FEEL ABOUT DRIVING?**, employed a semantic differential scale to reveal student assessments of driving.

Part IV required the students to rate the safety of a variety of driving practices and conditions.

Part V, titled **HOW OFTEN DO YOU DO THESE THINGS?**, used a verbal frequency scale to further reveal driving patterns.

Part VI, titled **WHAT DO YOU DO ON THE WEEKENDS?**, sought information on adolescent lifestyles.

Part VII was intended for non-drivers. It probed for life changes that students expect to occur after receiving their licence.

Part VIII asked students to name an "ideal car" and indicate their reasons for choosing it.

TREATMENT OF THE DATA

After the data were collected they were entered into the computer. Frequencies, means, chi squares and t-test calculations were produced through use of the SPSS statistical software package.

FINDINGS

To help make sense of the abundance of data, the findings are reported according to the following plan:

1. Description of **all** students' lifestyle features such as weekend activities, alcohol-related subjects, parents, laws, driving practises, and the car.
2. Description of **non-driving** students' lifestyle expectations of driving.
3. **Licenced** students reported driving behaviours and lifestyle realities.

ALL STUDENTS

Based on questionnaire data, 31.8% of the students indicated that they owned a car. About half of these cars were owned by grade twelve students (48.9%). Eighty-six percent of the students answered that they drive their parents' car. A further statistical breakdown illustrates that of the students who drive their parents' car, 22.6% were in grade ten, 38.9% in grade eleven and 38.5% in grade twelve.

Student Lifestyle: Weekend Activities

A relevant component of student lifestyle is the students' weekend activities. A series of items was developed to provide a description of this segment of life. The student responses are tabulated in Table 5.

Table 5
Lifestyle: Weekend Activities

VARIABLES (n = 1,376)	RESPONSE CATEGORIES							
	Always (1)	Often (2)	Some-times (3)	Seldom (4)	Never (5)	No Resp.	Combined	$\bar{X}$
Go to parties	14.8* (203)	25.8 (355)	27.4 (377)	18.2 (251)	10.8 (149)	3.0 (41)	100 (1,376)	2.85
Go to movies	4.8 (66)	20.3 (280)	40.3 (554)	25.4 (349)	6.3 (86)	3.0 (41)	100 (1,376)	3.09
Go to concerts	3.6 (49)	9.5 (131)	26.9 (370)	37.0 (509)	20.1 (277)	2.9 (40)	100 (1,376)	3.63
Stay home with family	4.4 (60)	21.8 (300)	28.4 (391)	28.0 (385)	14.5 (199)	3.0 (41)	100 (1,376)	3.28
Have friends over to house	7.3 (100)	27.0 (371)	35.4 (487)	20.5 (282)	6.8 (93)	3.1 (43)	100 (1,376)	2.93
Stay home by myself	3.6 (50)	15.2 (209)	28.9 (398)	30.3 (417)	18.6 (256)	3.3 (46)	100 (1,376)	3.47
Go over to friends	13.0 (179)	43.9 (604)	27.9 (384)	9.2 (126)	2.7 (37)	3.3 (46)	100 (1,376)	2.44
Hang around in public places	6.5 (90)	16.1 (222)	30.2 (416)	29.5 (406)	14.2 (195)	3.4 (47)	100 (1,376)	3.31
Drive around with friends	9.5 (131)	25.7 (353)	30.3 (417)	21.7 (298)	9.3 (128)	3.5 (49)	100 (1,376)	2.96
Go out with boy/ girlfriend	22.8 (314)	26.7 (368)	22.9 (315)	13.9 (191)	10.0 (138)	3.6 (50)	100 (1,376)	2.61
Go bowling	1.6 (22)	1.2 (17)	6.5 (90)	18.2 (250)	69.0 (949)	3.5 (48)	100 (1,376)	4.58
Play sports	17.9 (247)	24.5 (337)	23.0 (317)	15.9 (219)	14.9 (203)	3.8 (53)	100 (1,376)	2.85
Do homework	8.8 (121)	25.3 (348)	27.4 (377)	19.6 (270)	15.3 (210)	3.6 (50)	100 (1,376)	3.08
Work at a part-time job	21.1 (290)	21.3 (293)	16.2 (223)	12.6 (173)	25.4 (349)	3.5 (48)	100 (1,376)	3.01

* Percentages and Raw Numbers

Based on Table 5, the weekend activities in which the majority of students participated were visiting friends, dating, partying, playing sports, hosting friends or driving around. Table 6 ranks the weekend activities according to their means.

Table 6
Weekend Activities According To Ordered Means

ACTIVITY	MEAN* RANKING
Go over to friends	2.44
Go out with boy/girlfriend	2.61
Go to parties	2.85
Play sports	2.85
Have friends over to house	2.93
Drive around with friends	2.96
Work at a part-time job	3.01
Do homework	3.08
Go to movies	3.09
Stay home with family	3.28
Hang around in public places	3.31
Stay home by myself	3.47
Go to concerts	3.63
Go bowling	4.58

* Means based on following response categories:
Always = 1; Often = 2; Sometimes = 3; Seldom = 4; Never = 5

Over half of the students answered that they "sometimes" or "seldom" "stay home with the family" (56.4%; X means = 3.28) or "stay home by themselves" (59.2%; X means = 3.47). Thirty-five percent of the students (35.2%) responded that they "always" or "often" "drive around with friends."

Overall, students participated in a variety of activities on weekends of which visiting friends and dating were the most common.

Weekend Activities By School Year

To see whether significant differences in weekend activities existed between grade ten, eleven and twelve students, independent sample chi square tests were used.

There were no significant differences (p less than .05 with 8 d.f. and $X^2 = 15.51$) between grade ten, eleven and twelve student responses pertaining to "Doing homework," "Going bowling," "Going out with boyfriend or girlfriend," "Staying home with family" and "Going to concerts."

However, highly significant differences were recorded between grades for the following items: "Go to parties," "Have friends over to my house," "Go over to friend's house," "Stay home by myself," "Hang

around in public places," "Drive around with friends," and "Work at a part-time job" (p less than .05 with 8 d.f. and $X^2 = 15.51$). Tables seven to twelve illustrate more precisely the differences in answers by grades.

Table 7
Cross-tabulation Of Student Grades By Responses To The Item, "Go To Parties On Weekends"

		SCHOOL YEARS			
		10	11	12	Row Total
	1	72	79	51	202
Always		35.6	39.1	25.2	15.2
		14.3	18.3	12.8	
		5.4	5.9	3.8	
	2	112	115	127	354
Often		31.6	32.5	35.9	26.6
		22.3	26.7	32.0	
		8.4	8.6	9.5	
	3	147	120	109	376
Sometimes		39.1	31.9	29.0	28.3
		29.3	27.8	27.5	
		11.1	9.0	8.2	
	4	108	68	73	249
Seldom		43.4	27.3	29.3	18.7
		21.5	15.8	18.4	
		8.1	5.1	5.5	
	5	63	49	37	149
Never		42.3	32.9	24.8	11.2
		12.5	11.4	9.3	
		4.7	3.7	2.8	
	Column Total	502	431	397	1330
		37.7	32.4	29.8	100.0

Chi-Square	D.F.	Significance
18.76722	8	.0162

Table seven indicates that the obtained $X^2 = 18.77$, d.f. = 8 was significant at better than the .05 level (p = .0162). The results show that more grade eleven and twelve students (45.0% and 44% respectively) answered that they "always" or "often" attend parties than did grade 10 students (36.6%). Also less grade eleven (27.2%) and

twelve students (27.7%) than grade ten students (34.0%) answered they "seldom" or "never" go to parties on weekends.

Table 8
Cross-tabulation Of Student Grades By Responses To The Item, "Drive Around With Friends On Weekends"

		SCHOOL YEARS			Row Total
		10	11	12	
	1	60	44	26	130
Always		46.2	33.8	20.0	9.8
		12.0	10.3	6.6	
		4.5	3.3	2.0	
	2	128	132	92	352
Often		36.4	37.5	26.1	26.6
		25.5	31.0	23.3	
		9.7	10.0	7.0	
	3	139	142	135	416
Sometimes		33.4	34.1	32.5	31.5
		27.7	33.3	34.2	
		10.5	10.7	10.2	
	4	110	80	106	296
Seldom		37.2	27.0	35.8	22.4
		22.0	18.8	26.8	
		8.3	6.1	8.0	
	5	64	28	36	128
Never		50.0	21.9	28.1	9.7
		12.8	6.6	9.1	
		4.8	2.1	2.7	
	Column Total	501	426	395	1322
		37.9	32.2	29.9	100.0

Chi-Square	D.F.	Significance
30.54242	8	.0002

Based on table 8, the obtained $X^2 = 30.54$, d.f. = 8 was highly significant at better than the .001 level ($p = .0002$). More grade eleven students responded that they drive around with their friends on weekends (41.3%; Always + Often) than did grade ten students (37.5%; Always + Often) and grade twelve students (29.9%; Always + Often).

Table 9
Cross-tabulation Of Student Grades By Responses To The Item, "Hang Around Public Places On Weekends"

		SCHOOL YEARS			Row
		10	11	12	Total
	1	50	28	12	90
Always		55.6	31.1	13.3	6.8
		10.0	6.5	3.0	
		3.8	2.1	.9	
	2	107	69	43	219
Often		48.9	31.5	19.6	16.5
		21.4	16.1	10.9	
		8.1	5.2	3.2	
	3	160	145	109	414
Sometimes		38.6	35.0	26.3	31.3
		32.0	33.9	27.5	
		12.1	11.0	8.2	
	4	130	125	151	406
Seldom		32.0	30.8	37.2	30.7
		26.0	29.2	38.1	
		9.8	9.4	11.4	
	5	53	61	81	195
Never		27.2	31.3	41.5	14.7
		10.6	14.3	20.5	
		4.0	4.6	6.1	
	Column	500	428	396	1324
	Total	37.8	32.3	29.9	100.0

Chi-Square	D.F.	Significance
59.27053	8	.0000

According to Table 9, the obtained $X^2 = 59.27$, d.f. = 8 was highly significant at better than the .001 level (p = .0000). Overall, "hanging around public places on weekends" tended to be more predominant for grade ten students (Always + Often = 31.4%) than for grade eleven (Always + Often = 22.6%) or grade twelve students (Always + Often = 13.9%). Only 10.6% of the grade ten students reported that they "never" do this.

Table 10
Cross-tabulation Of Student Grades By Responses To The Item, "Work At A Part-Time Job On Weekends"

		SCHOOL YEARS			
		10	11	12	Row Total
Always	1	92	92	106	290
		31.7	31.7	36.6	21.9
		18.4	21.4	26.8	
		7.0	7.0	8.0	
Often	2	109	86	98	293
		37.2	29.4	33.4	22.1
		21.8	20.0	24.8	
		8.2	6.5	7.4	
Sometimes	3	73	85	62	220
		33.2	38.6	28.2	16.6
		14.6	19.8	15.7	
		5.5	6.4	4.7	
Seldom	4	62	58	53	173
		35.8	33.5	30.6	13.1
		12.4	13.5	13.4	
		4.7	4.4	4.0	
Never	5	163	108	76	347
		47.0	31.1	21.9	26.2
		32.7	25.2	19.2	
		12.3	8.2	5.7	
	Column Total	499	429	395	1323
		37.7	32.4	29.9	100.0

Chi-Square	D.F.	Significance
29.00328	8	.0003

For the item, "work at a part-time job on weekends," the obtained $X^2 = 29.00$, d.f. = 8 was highly significant at better than the .001 level ($p = .0003$). More grade twelve students reported that they "always" or "often" work at weekend part-time jobs (Combined = 51.6%) than did grade eleven students (Combined = 41%) or grade ten students (Combined = 40.02%).

Table 11
Cross-tabulation Of Student Grades By Responses To The Item, "Go Over To Friend's House On Weekends"

		SCHOOL YEARS			
		10	11	12	Row Total
Always	1	87	51	40	178
		48.9	28.7	22.5	13.4
		17.4	11.9	10.1	
		6.6	3.8	3.0	
Often	2	235	193	173	601
		39.1	32.1	28.8	45.4
		46.9	45.0	43.8	
		17.7	14.6	13.1	
Sometimes	3	132	134	117	383
		34.5	35.0	30.5	28.9
		26.3	31.2	29.6	
		10.0	10.1	8.8	
Seldom	4	35	39	52	126
		27.8	31.0	41.3	9.5
		7.0	9.1	13.2	
		2.6	2.9	3.9	
Never	5	12	12	13	37
		32.4	32.4	35.1	2.8
		2.4	2.8	3.3	
		.9	.9	1.0	
	Column Total	501	429	395	1325
		37.8	32.4	29.8	100.0

Chi-Square	D.F.	Significance
21.86082	8	.0052

Table 11 illustrates that the obtained $X^2 = 21.86$, d.f. = 8 was significant at better than the .01 level (p = .0052). More grade ten students answered that they either "always" or "often" 'go over to a friend's house on weekends" (64.3%) than did grade eleven (56.9%) or grade twelve students (53.9%). However, all three groups of students indicated that they often visit friends on weekends.

Table 12
Cross-tabulation Of Student Grades By Responses To The Item, "Have Friends Over To My House On Weekends"

		SCHOOL YEARS			Row
		10	11	12	Total
	1	52	29	19	100
Always		52.0	29.0	19.0	7.5
		10.4	6.8	4.8	
		3.9	2.2	1.4	
	2	162	120	87	369
Often		43.9	32.5	23.6	27.8
		32.3	28.0	21.9	
		12.2	9.0	6.6	
	3	182	153	150	485
Sometimes		37.5	31.5	30.9	36.5
		36.3	35.7	37.7	
		13.7	11.5	11.3	
	4	81	93	108	282
Seldom		28.7	33.0	38.3	21.2
		16.2	21.7	27.1	
		6.1	7.0	8.1	
	5	24	34	34	92
Never		26.1	37.0	37.0	6.9
		4.8	7.9	8.5	
		1.8	2.6	2.6	
	Column	501	429	398	1328
	Total	37.7	32.3	30.0	100.0

Chi-Square	D.F.	Significance
36.80441	8	.0000

Results in Table 12 show that the obtained $X^2 = 36.80$, d.f. = 8 was highly significant at better than the .001 level (p = .0000). Having friends over was most predominant for grade ten students (Always + Often = 42.7%).

Weekend Activities By Gender

Chi square analysis of student weekend activities and gender produced the following findings:

1. Males go to parties on a more regular basis than females (X^2 = 16.30; d.f. = 4; p = .0026).
2. Females go to movies more often than do males (X^2 = 19.17; d.f. = 4; p = .0007).
3. Males go to concerts more often than do females (X^2 = 19.00; d.f. = 4; p = .0008).
4. Females stay home with their families more often than do males (X^2 = 18.9; d.f. = 4; p = .0008).
5. Females have friends over to their house more often than do males (X^2 = 14.2; d.f. = 4; p = .0067).
6. Females stay home by themselves more often than do males (X^2 = 16.80; d.f. = 4; p = .0021).
7. Females go out with boyfriends more often than males with girlfriends (X^2 = 43.12; d.f. = 4; p = .0000).
8. Males play sports more often than females (X^2 = 33.89; d.f. = 4; p = .0000).
9. Females do homework more often than males (X^2 = 31.85; d.f. = 4; p = .0000).
10. Males work at part-time jobs more often than do females (X^2 = 15.46; d.f. = 4; p = .0038).

The above summaries are based on a level of significance whereby X^2 = 4.303; d.f. = 4; p less than .01).

Lifestyle and Alcohol

Seven questions concerning general lifestyle and alcohol-related matters were asked of all the students. Table 13 illustrates the findings.

Table 13
Student Lifestyle And Alcohol

VARIABLES (n = 1,376)	RESPONSE CATEGORIES*							
	SA (1)	A (2)	N (3)	D (4)	SD (5)	NR	Combined	$\bar{X}$
It is easy for most people my age to get alcohol if they want it.	48.0[1] (660)	35.0 (481)	10.5 (145)	3.2 (44)	1.7 (24)	1.6 (22)	100 (1,376)	1.74
Drinking alcohol is common for teenagers in this community.	39.1 (538)	46.9 (645)	10.9 (150)	1.5 (21)	.6 (8)	1.0 (14)	100 (1,376)	1.76
Most of my friends drink alcohol.	30.6 (421)	39.3 (541)	13.5 (186)	10.2 (140)	4.8 (66)	1.6 (22)	100 (1,376)	2.18
My parents would be upset if they thought I went to parties where people were drinking alcohol.	17.4 (240)	17.4 (240)	18.8 (258)	26.9 (370)	18.4 (253)	1.1 (15)	100 (1,376)	3.12
Young people in this community go to a lot of parties.	39.1 (538)	43.5 (599)	12.0 (165)	3.2 (44)	.7 (10)	1.4 (20)	100 (1,376)	1.81
If I had too much to drink I wouldn't drive. I'd get home some other way and pick up the car in the morning.	63.3 (871)	24.9 (343)	6.3 (87)	2.1 (29)	1.8 (25)	1.5 (21)	100 (1,376)	1.52
There's not much for young people to do in this community.	32.8 (451)	25.1 (345)	16.0 (220)	16.9 (233)	7.8 (108)	1.4 (19)	100 (1,376)	2.41

* SA = Strongly Agree; A = Agree; N = Neutral; D = Disagree; SD = Strongly Disagree; NR = No Response

1 Percentages and Raw Numbers

Based on the data in Table 13, a large majority of students agreed that, (1) it is easy for people their age to get alcohol if they want it (83.0%), (2) drinking alcohol is common for most teenagers in the community (86.0%), (3) most of the students' friends drink alcohol (69.9%) and (4) young people in the respondents' communities attend a lot of parties (82.6%).

Of interest is that only 34.8% of the students answered that "their parents would be upset if they thought their sons or daughters went to parties where people were drinking alcohol." This would mean that 65.2% of the students were either undecided or thought that their parents would **not** be upset if students attended drinking parties. Furthermore, slightly more than half of the student respondents (57.9%) agreed that there is not much for young people to do in the community

and 82.6% of them agreed young people attend a lot of parties. It would seem, therefore, that although partying and drinking amongst young people are somewhat influenced by a lack of things for young people to do in the community, they are more probably a choice of available lifestyle options.

The majority of students agreed to the item "If I had too much to drink I would not drive. I would get home some other way and pick up the car in the morning," (88.2%). Based on the responses, the majority of students would not drink and drive.

A chi square analysis of Lifestyle/Alcohol attitudes by grades showed some significant differences. For example, for the item, "It is easy for most people my age to get alcohol if they want it," 90.2% of grade twelve students, 83.1% of grade eleven students and 80.7% of grade ten students agreed. The obtained $X^2 = 22.97$, d.f. = 8 was significant at better than the .01 level ($p = .0044$).

Equal numbers of grade eleven and grade twelve students (76%) agreed that most of their friends drink alcohol. The grade ten agreement was 63%. The obtained $X^2 = 37.10$, d.f. = 8 was significant at better than the .001 level ($p = .0000$).

When students were asked whether their parents would be upset if they thought students attended drinking parties, the overall agreement rate was 34.8%. A breakdown of this percentage shows the following agreement rates by grade: grade twelve: 54.5%, grade eleven: 46.2%, and grade ten: 38.9%. The obtained $X^2 = 44.69$, d.f. = 8 was significant at better than the .001 level ($p = .0000$). Surprisingly, more grade twelve students believed that their parents would be upset about them attending drinking parties than did grade ten students. Overall, most students did not believe that their parents would be upset if their sons or daughters attended drinking parties.

A further chi square analysis of Lifestyle/Alcohol items by gender shows some significant differences in attitudes between boys and girls. To illustrate, the item, "Most of my friends drink alcohol," received 75.6% agreement from boys compared to 66.9% agreement from girls. The obtained $X^2 = 23.21$, d.f. = 4 was significant at better than the .001 level (p less than .0001). Similarly, the item, "My parents would be upset if they thought I went to parties," received 39.4% agreement from girls compared to 20.7% from boys. The obtained $X^2 = 21.52$, d.f. = 4 was significant at better than the .001 level ($p = .0001$).

Lifestyle And Student Attitudes Regarding General Risk-Taking Concepts

Although specific risk-taking attitudes and behaviours are covered further in the report, several items which generally touched on lifestyle

and risk-taking were included in the questionnaire. The findings are tabulated in Table 14.

Table 14
Student Lifestyle And Attitudes Regarding General Risk-Taking Concepts

VARIABLES (n = 1,376)	RESPONSE CATEGORIES*							
	SA (1)	A (2)	N (3)	D (4)	SD (5)	NR	Combined	$\bar{X}$
Young drivers take more chances than older drivers.	9.7[1] (134)	26.5 (364)	27.1 (373)	22.2 (305)	13.3 (183)	1.2 (17)	100 (1,376)	3.02
It is okay to drive when you're a little bit impaired.	1.8 (25)	3.6 (50)	10.1 (139)	27.3 (375)	56.0 (771)	1.2 (16)	100 (1,376)	3.37
Some people drive more cautiously when they are impaired.	5.5 (75)	16.4 (226)	16.6 (229)	20.0 (275)	40.5 (557)	1.0 (14)	100 (1,376)	3.74
I'd call my parents to pick me up from a party rather than drive home with someone who had too much to drink.	48.0 (660)	24.4 (336)	14.2 (196)	8.3 (114)	4.0 (55)	1.1 (15)	100 (1,376)	1.95
If I had too much to drink I wouldn't drive. I'd get home some other way and pick up the car in the morning.	63.3 (871)	24.9 (343)	6.3 (87)	2.1 (29)	1.8 (25)	1.5 (21)	100 (1,376)	1.52
Driving fast is exciting.	16.8 (231)	26.9 (370)	25.5 (351)	18.9 (260)	10.2 (141)	1.7 (23)	100 (1,376)	2.79

* SA = Strongly Agree; A = Agree; N = Neutral; D = Disagree; SD = Strongly Disagree; NR = No Response

1 Percentage and Raw Numbers

Thirty-six percent (36.2%) of the students agreed that "young drivers take more chances than older drivers." The majority of students disagreed to the items, "It is okay to drive when you're a little bit impaired" (83.3%) and "Some people drive more cautiously when they are impaired" (60.5%). Eighty-eight percent (88.2%) of the students agreed that if they had too much to drink they would not drive; they would get home another way and pick up the car in the morning. Less than half of the students (43.7%) did not think that driving fast is exciting.

A chi square analysis of Lifestyle/Risk-Taking Concept items by school years showed little significant difference in attitudes among grade

ten, eleven and twelve students. However, cross-tabulation by gender did show some significant differences in attitudes between boys and girls. More girls (92.7%) than boys (76.0%) would not drive if they had too much to drink. Instead they would get home some other way and pick up the car in the morning (X^2 = 25.18, d.f. = 4, p = .0000). On a similar item, 79.7% of the girls compared to 65.8% of the boys would call their parents to pick them up from a party rather than drive with someone who had too much to drink (X^2 = 43.94, D.F. = 4, p = .0000).

Pertaining to the view of impaired driving, 89.0% of the girls compared to 79.3% of the boys did not think that it is okay to drive when you are a little impaired (X^2 = 30.89, d.f. = 4, p = .0000). More girls (65.6%) than boys (53.7%) did not believe that some people drive more cautiously when they are impaired (X^2 = 39.37, d.f. = 4, p = .0000).

Girls tended to be more cautious than boys. Witness their lower agreement than boys to the items "young drivers take more chances than old drivers" (Girls; 21.8%, Boys; 42.2%; X^2 = 20.29, d.f. = 4, p = .0004) and "fast driving is exciting." (Girls; 29.5%, Boys; 61.2%; X^2 = 185.13, d.f. = 4, p = .0000).

Student Views On Parents And Driving-Related Issues

Four items on the questionnaire were included to provide a glimpse of students' views on how their parents react to lifestyle/driving-related issues such as drinking, partying, peer driving and family car usage. Table 15 highlights the overall findings.

Table 15
Student Views On Parents And Driving-Related Issues

VARIABLES (n = 1,376)	RESPONSE CATEGORIES*							
	SA (1)	A (2)	N (3)	D (4)	SD (5)	NR	Combined	$\bar{X}$
Parents should accept the fact that young people drink alcohol before they are legally allowed to.	31.6[1] (435)	38.0 (523)	17.0 (234)	6.8 (93)	4.9 (67)	1.7 (24)	100 (1,376)	2.14
Parents should only let young drivers use the family car for "essential" trips, like to sports practices and music lessons.	3.8 (52)	8.2 (113)	17.1 (235)	35.5 (488)	34.4 (474)	1.0 (14)	100 (1,376)	3.90
My parents would be upset if they thought I went to parties where people were drinking alcohol.	17.4 (240)	17.4 (240)	18.8 (258)	26.9 (370)	18.4 (253)	1.1 (15)	100 (1,376)	3.12
My parents would be upset if they could see the way some of my friends drive.	17.4 (240)	27.8 (383)	24.6 (338)	20.6 (284)	8.0 (110)	1.5 (21)	100 (1,376)	2.74

* SA = Strongly Agree; A = Agree; N = Neutral; D = Disagree; SD = Strongly Disagree; NR = No Response

1 Percentages and Raw Numbers

According to Table 15, 69.6% of students agreed that parents should accept the fact that young people drink alcohol before they are legally allowed. Further chi square analysis of this item by gender shows that more boys (74.6%) than girls (67.5%) agreed. The obtained X^2 = 28.77, d.f. = 4 was significant at better than the .001 level (p = .0000). By school year, more grade eleven students (77.2%) agreed that parents should accept young people drinking alcohol than grade twelve (68.1%) or grade ten students (67.6%). The obtained X^2 = 21.49, d.f. = 8 was significant at better than the .01 level (p = .0059).

Of the students who had specific views, most students (44.3%), did not think that their parents would be upset if students went to parties where people were drinking alcohol. Further analysis shows that more boys (48.0%) than girls (43.7%) (X^2 = 21.52, d.f. = 4, p = .0002), and more grade twelve (56.7%) than grade eleven (40.2%) and grade ten (32.1%) (X^2 = 78.20, d.f. = 8, p = .0000) did not think parents would be upset.

Forty-five percent of all respondents agreed that their parents would be upset if they saw the way students' friends drive. However, 24.6% of the responses were neutral. There was no significant difference between male and female responses. However, more grade twelve students (54.5%) than grade eleven (46.2%) and grade ten students (38.9%) indicated that their parents would be upset if they saw how some of their friends drove.

The majority of students (69.9%) did not agree with the statement, "Parents should only let young drivers use the family car for essential trips like sports practices and music lessons."

Student Views On Legalities

To capture a broad perspective on legalities, four items about legal matters were included on the questionnaire. The data are illustrated in Table 16.

Table 16
Student Views On Legalities

VARIABLES (n = 1,376)	RESPONSE CATEGORIES*							
	SA (1)	A (2)	N (3)	D (4)	SD (5)	NR	Combined	$\bar{X}$
The legal age for drinking alcohol should be raised to 21.	9.9[1] (136)	6.3 (87)	15.5 (213)	22.3 (307)	44.5 (613)	1.5 (20)	100 (1,376)	3.87
The legal age for driving should be lowered to 14 like it is in some countries.	6.5 (90)	6.7 (92)	16.8 (231)	29.7 (408)	38.7 (532)	1.7 (23)	100 (1,376)	3.89
If the legal age for drinking alcohol was raised, fewer underaged people would drink.	3.3 (46)	4.9 (67)	7.5 (103)	28.8 (396)	54.1 (744)	1.5 (20)	100 (1,376)	4.27
The legal age for driving should be raised to 18.	3.2 (44)	4.9 (67)	12.6 (174)	30.2 (415)	48.2 (663)	.9 (13)	100 (1,376)	4.16
It is important to follow traffic rules.	64.1 (882)	28.5 (392)	3.5 (48)	1.6 (22)	1.3 (18)	1.0 (14)	100 (1,376)	1.46

* SA = Strongly Agree; A = Agree; N = Neutral; D = Disagree; SD = Strongly Disagree; NR = No Response

1 Percentages and Raw Numbers

Questions concerning the raising or lowering of driving age received strong student disapproval. For example, 68.4% of the students opposed the idea of lowering the driving age to 14. At the same time, 78.4%

of the students did not want to see the legal driving age raised to 18. The majority of students also disagreed with the items that the legal drinking age be raised to 21 (66.8%), and that if the legal drinking age was raised there would be a reduction in underaged people who would drink (78.4%).

The general item, "It is important to follow traffic rules," received overwhelming student agreement (92.6%).

Student Views On Young Peoples' General Driving Practices

Responses to two items concerning driving practices relevant to young people are analyzed in Table 17.

Table 17
Student Views On Young Peoples' General Driving Practices

ITEMS	RESPONSE CATEGORIES*							
	SA (1)	A (2)	N (3)	D (4)	SD (5)	NR	Combined	$\bar{X}$
Young people take more chances than older drivers.	9.7[1] (134)	26.5 (364)	27.1 (373)	22.2 (305)	13.3 (183)	1.2 (17)	100 (1,376)	3.03
Young people drive the way their friends want them to, not the way they should.	4.0 (55)	14.7 (202)	24.2 (333)	34.3 (472)	21.6 (297)	1.2 (17)	100 (1,376)	3.55

* SA = Strongly Agree; A = Agree; N = Neutral; D = Disagree; SD = Strongly Disagree; NR = No Response

1 Percentages and Raw Numbers

Student answers to the questions about young people taking more chances than older people, and young people driving according to their friends' wishes, showed high percentages of neutral responses (27.1% and 24.2% respectively). Only thirty-six percent (36.2%) of the students agreed that young people take more chances than older drivers. Most students believed that young drivers do not drive the way their friends want them to, but the way they should (55.9%).

There was a significant difference between boys' and girls' answers to the question of whether young people take more chances than older drivers ($X^2 = 20.29$, d.f. = 4, $p = .0004$). Approximately ten percent (10.4%) more boys than girls agreed that young people take more chances than older drivers. There was no significant difference between student responses and grades (p less than .05). Also there was no significant difference in responses between gender and school years concerning student views on whether young people drive the way their friends want them to, or the way they should.

Student Views On The Car

Two items about student views of cars were included in the questionnaire. The results are tabulated in Table 18.

Table 18
Student Views On The Car

VARIABLES (n = 1,376)	RESPONSE CATEGORIES*							
	SA (1)	A (2)	N (3)	D (4)	SD (5)	NR	Combined	$\bar{X}$
The most important thing about a car is that it gets good gas mileage.	6.3[1] (87)	17.6 (242)	26.4 (363)	30.2 (416)	18.3 (252)	1.2 (16)	100 (1,376)	3.37
It is important to have a fast, powerful car.	7.6 (104)	8.6 (119)	28.6 (393)	33.9 (467)	20.0 (275)	1.3 (18)	100 (1,376)	3.51

* SA = Strongly Agree; A = Agree; N = Neutral; D = Disagree; SD = Strongly Disagree; NR = No Response

1 Percentages and Raw Numbers

A reading of Table 18 shows that although a large group of students was neutral as to the importance of good gas mileage and power in a car (26.4% and 28.6% respectively), many young people felt that good gas mileage is not the most important thing about a car (48.5%). Speed and power were also not considered to be important features of a car (53.9%).

Student Choice Of Ideal Car

In order to obtain a perspective on students' lifestyle preferences as personified in their choice of ideal cars, two open-ended questions were included in the questionnaire. Question one was, "Imagine that you could have any car. Please write the name of the car you would choose." The follow-up question was, "Why would you choose this car?" The categorized responses are recorded in tables 19 and 20.

Table 19
Ideal Cars By Frequency of Categories

CATEGORY OF VEHICLE	FREQUENCY (n)	(%)
Exotic/Luxury (Most Expensive, Prestige, e.g. Ferrari, BMW, Lamborghini, Porsche, Mercedes, Jaguar)	441	(33.9%)
Sports Car (e.g. Camaro, Firebird, Corvette, Fiero, Mazda RX7, Nissan 300ZX)	289	(22.2%)
2 and 4 - Door Sedans, Hatchbacks - Lower Priced (e.g. Volkswagen, Rabbit, Honda Civic, Toyota, Datsun)	231	(17.8%)
Specific Aged Car (e.g. 1965 Mustang, 1969 Volkswagen Beetle, 1956 Chevrolet etc.)	143	(11.0%)
Four X Four, or Trucks	82	(6.3%)
High-Priced Sedans (e.g. Volvo, Peugeot, Toyota Cressida)	40	(3.1%)
Van/Camper	8	(.6%)
Motorcycles	5	(.4%)
Station Wagon	4	(.3%)
Other (Any, Unnamed etc.)	44	(3.4%)
Don't Know	12	(.9%)
TOTAL	1,299*	100%

* 77 students did not respond

Table 20
Reasons For Choice Of Ideal Cars

REASONS	FREQUENCY (n)	(%)
Looks/Appearance (shape, design, style, fancy)	479	(37.6%)
Power/Performance (muscle, noise, power, burn-up speed, fast etc.)	176	(13.8%)
Economics/Affordability (fuel, repairs, reliability, parts, insurance, cost)	158	(12.4%)
View of Driving (fun, exciting, control, maneuverable, handling, shifting gears)	92	(7.2%)
Utility/Purpose Of Trip (transportation, comfort, size, practical, convenience, storage space)	76	(6.0%)
Exotic/Luxury/Prestige (prestige, showy, classy, expensive, nationality (European))	54	(4.2%)
General/Non-Specific (nice, like it, great)	54	(4.2%)
Construction/Safety/Quality (strong, lasting, safety, sturdy, well-built)	50	(3.9%)
Small (compact, little)	38	(3.0%)
View of Self Through Car (status, sentiment, love, life desire)	33	(2.6%)
Enhance Social Life (cruise, sex, friends, nightlife)	19	(1.5%)
Other (generalizations, unusual responses, don't knows, non-specifics)	45	(3.5%)
TOTAL	1,274*	100%

* 102 students did not respond

Based on the categorizations of open-ended responses, the greatest number of students would desire exotic/luxury cars such as Porsches, Lamborghinis and Ferraris (33.9%). Mercedes, Jaguars, BMWs, Audis and the occasional Rolls Royce and Cadillac were also mentioned.

As might be expected, the aspect of a car most favourable to students is its "classy looks"/appearance. Descriptors often used were, "gorgeous body," "sleek," "slick," "eye-catching," "classy design," "convertible" and "attention getting" (34.8%).

Other prominent categories of cars students would select if given the choice, are sportscars such as Corvettes, Camaros, Fieros, Mazdas

RX7s, Nissan 300ZXs (22.2%) and economy two/four door sedans and hatchbacks such as Volkswagen Rabbits, Honda Civics, Toyotas and Datsuns (17.8%).

Corresponding reasons given for the selection of ideal automobiles were power/performance (13.8%) and economics/affordability (12.4%).

Students and Driving Practices

Driving is a significant lifestyle feature for licenced students and a future event with built-in lifestyle expectations for non-driving students. Therefore, questions were asked and samples developed, to measure the difference between licensed students' realities and non-driving students' expectations.

However, one set of items, using the semantic differential, concerned all students' views on the act of driving. The findings are listed in Table 21.

Table 21
Student Views On Driving

	RESPONSES								MEANS	MODES
Necessary	____	____	____	____	____	____	____	Unnecessary	2.20	1
	1	2	3	4	5	6	7			
	42.6%	25.2%	13.0%	12.9%	2.6%	2.1%	1.6%			
Important	____	____	____	____	____	____	____	Unimportant	2.25	1
	1	2	3	4	5	6	7			
	37.9%	27.4%	15.9%	13.2%	3.1%	1.4%	1.1%			
Safe	____	____	____	____	____	____	____	Dangerous	3.01	4
	1	2	3	4	5	6	7			
	17.9%	20.6%	19.4%	29.3%	7.5%	3.9%	1.5%			
Exhausting	____	____	____	____	____	____	____	Relaxing	4.82	4
	1	2	3	4	5	6	7			
	.7%	2.0%	6.2%	35.9%	27.6%	16.5%	11.0%			
Boring	____	____	____	____	____	____	____	Exciting	5.31	5
	1	2	3	4	5	6	7			
	.7%	.8%	2.2%	20.6%	34.2%	22.3%	19.2%			
Difficult	____	____	____	____	____	____	____	Easy	5.52	7
	1	2	3	4	5	6	7			
	.8%	1.9%	5.3%	16.9%	17.8%	26.1%	31.0%			
Unpleasant	____	____	____	____	____	____	____	Pleasant	5.78	6
	1	2	3	4	5	6	7			
	.7%	.5%	1.5%	10.4%	21.6%	34.6%	30.7%			

If one were to describe driving according to the student responses in Table 21 it would be an act definitely necessary and important, somewhat relaxing yet dangerous, quite exciting, very easy and very pleasant.

Safe Driving Practices: Risk-Taking

Part of driving is risk-taking. Student answers to a series of items on this subject are featured in Tables 22 and 23.

Table 22
Risk-Taking: Student Views On The Safety Of Certain Driving Practices

* VS = Very Safe; S = Safe; N = Neutral; D = Dangerous; VD = Very Dangerous; NR = No Response

VARIABLES (n = 1,376)	RESPONSE CATEGORIES*							
	VS (1)	S (2)	N (3)	D (4)	VD (5)	NR	Combined	$\bar{X}$
Driving at night	7.6[1] (104)	40.3 (554)	37.9 (522)	10.8 (148)	.9 (13)	2.5 (35)	100 (1,376)	2.56
Driving on the highway	16.9 (232)	48.9 (673)	23.2 (319)	7.8 (108)	.6 (8)	2.6 (37)	100 (1,376)	2.24
Driving in the snow	1.9 (26)	7.7 (106)	18.9 (260)	47.3 (651)	21.5 (296)	2.6 (37)	100 (1,376)	3.81
Driving in the rain	5.5 (76)	25.3 (348)	33.7 (464)	29.4 (405)	3.2 (44)	2.8 (39)	100 (1,376)	3.00
Driving in daytime	49.1 (676)	39.6 (545)	6.6 (91)	1.5 (21)	.4 (5)	2.7 (38)	100 (1,376)	1.61
Passing other cars	9.7 (134)	30.1 (414)	33.9 (467)	19.1 (263)	3.2 (44)	3.9 (53)	100 (1,376)	2.75
Driving after drinking a few beers	1.7 (24)	3.9 (53)	11.3 (156)	26.3 (362)	53.6 (738)	3.1 (43)	100 (1,376)	4.30
Riding with a driver who had a few beers	1.7 (23)	3.1 (42)	9.8 (135)	24.6 (339)	57.8 (795)	3.1 (42)	100 (1,376)	4.38
Speeding on residential streets	2.5 (34)	5.2 (71)	15.9 (219)	46.4 (639)	27.3 (375)	2.7 (38)	100 (1,376)	3.94
Speeding on the highway	6.8 (93)	22.4 (308)	32.7 (450)	25.7 (354)	9.4 (129)	3.1 (42)	100 (1,376)	3.09
Driving with friends	18.0 (248)	47.3 (651)	27.1 (373)	3.3 (46)	1.5 (20)	2.7 (38)	100 (1,376)	2.20
Driving without a seat belt	4.4 (60)	6.5 (89)	16.4 (226)	34.6 (476)	35.5 (489)	2.6 (36)	100 (1,376)	3.93
Driving during rush hour	6.3 (87)	18.3 (252)	40.4 (556)	26.7 (367)	5.5 (76)	2.7 (38)	100 (1,376)	3.07

[1] Percentages and Raw Numbers

Table 23
Student Views On Driving Practices In Declining Order Of Priority

VARIABLES	MEANS*	MODES
Driving in daytime	1.61	1
Driving with friends	2.20	2
Driving on the highway	2.24	2
Driving at night	2.56	2
Passing other cars	2.75	3
Driving in the rain	3.00	3
Driving during rush hour	3.07	3
Speeding on the highway	3.09	3
Driving in the snow	3.81	4
Driving without a seat belt	3.93	5
Speeding on residential streets	3.94	4
Driving after drinking a few beers	4.30	5
Riding with a driver who had a few beers	4.38	5

* Means based on the following scale:

Very Safe; Safe; Neutral; Dangerous; Very Dangerous
(1) (2) (3) (4) (5)

Based on the means and modes recorded in tables 20 and 21, students believed that "driving in the daytime," "driving with friends," "driving on the highway," "driving at night" and "passing cars" were safe or relatively safe (all received means of less than 3). However, "passing cars" received a 33.9% neutral response, which somewhat skews the finding. (See Table 22)

According to respondents, driving events like "driving in the rain" (Mean = 3.00), "driving during rush hour" (Mean = 3.07) and "speeding on the highway" (Mean = 3.09) tended to fall somewhere between being safe and dangerous.

Definite dangerous driving practices were considered to be "driving without a seat belt" (Mean = 3.93), "speeding on residential streets" (Mean = 3.94), "driving after drinking a few beers" (Mean = 4.30) and "riding with a driver who had a few beers" (Mean = 4.38). Two driving activities considered to be very dangerous by students were alcohol-related.

Although "driving without a seat belt" was considered to be dangerous by respondents, three 1985 seat belt wearing surveys in the Okanagan showed that 16-24 year old occupants consistently had the lowest occupant wearing rates (Rothe, 1986).

An analysis of safe driving activities by gender indicates numerous significant differences (p less than .001). The greatest difference concerned the item, "speeding on the highway." Twice as many boys (31.4%) as girls (15.8%) answered that speeding on the highway was safe and five times as many boys as girls thought it was very safe (Boys = 11.8%; Girls = 2.7%) (X^2 = 111.71, d.f. = 4, p = .0000). "Driving during rush hour" was considered to be safe by 32.2% of the boys and 19.3% of the girls (X^2 = 46.12, d.f. = 4, p = .0000). "Speeding on residential streets" was believed to be dangerous by 81.3% of the girls compared to only 69.3% of the boys (X^2 = 42.98, d.f. = 4, p = .0000) and "passing other cars" was thought to be safe by 46.6% of the boys and 36.9% of the girls (X^2 = 31.45, d.f. = 4, p = .0000).

Items on drinking and driving related to male and female responses also proved to be significant. For example, "driving after drinking a few beers" was considered to be safe by 10.3% of the boys compared to 1.8% of the girls (X^2 = 72.05, d.f. = 4, p = .0000) and "riding with a driver who had a few beers" was answered as safe by 8.5% of the boys and 1.7% of the girls (X^2 = 72.93, d.f. = 4, p = .0000). The reverse shows that 89.7% of the girls compared to 74.3% of the boys answered that driving after a few beers was dangerous and 92.0% of the girls and 77.1% of the boys felt that riding with a driver who drank a few beers was dangerous. Girls tended to be more conservative about road safety than boys.

A cross-tabulation of each item by students' school years shows that there were no significant differences between grades and items on driving practices (X^2 = 15.51, d.f. = 8, p just greater than .05).

NON-DRIVING STUDENTS

Non-Driving Students' Expectations Of Driving

To establish the difference in students' expectations of driving and the reality of licensed drivers, each group was asked a series of thematic questions. Non-driver questions addressed the future, while licensed driver questions featured the present. Descriptions of non-driver responses to items on becoming drivers are located in Tables 24 and 25.

Table 24
Non-Licensed Students' Expectations of Driving

VARIABLES	RESPONSE CATEGORIES*						
	SA (1)	A (2)	N (3)	D (4)	SD (5)	Combined	$\bar{X}$
When I can drive, it'll be easier for me to get to after-school activities, like sports practices and music lessons.	52.5[1]	32.3	10.9	2.1	2.2	100	1.69
When I can drive, I'll be able to spend more time with my friends.	25.6	35.8	27.0	9.1	2.2	100	2.27
Life will be a lot more fun when I can drive.	30.2	33.6	28.8	6.0	1.4	100	2.15
When I can drive, I'll feel more like an adult.	17.8	32.3	32.5	13.8	3.6	100	2.53
When I can drive, it'll be easier for me to get part-time jobs, if I want them.	40.6	36.1	15.6	5.8	1.8	100	1.92
Driving will be a lot of fun.	25.4	37.2	33.2	3.3	.9	100	2.17
I will spend less time with my family after I can drive.	7.8	14.5	32.8	37.2	7.6	100	3.22
When I can drive, my parents will treat me more like an adult.	8.1	24.0	40.3	20.1	7.6	100	2.95
Being able to drive will give me a lot more freedom.	26.1	38.2	24.4	8.7	2.5	100	2.23
I'll be more popular when I can drive.	3.6	7.8	36.8	33.3	18.5	100	3.55
I'm going to get my driver's license as soon as possible after my sixteenth birthday.	29.8	16.9	22.6	18.4	12.3	100	2.67

* SA = Strongly Agree; A = Agree; N = Neutral; D = Disagree; SD = Strongly Disagree; X = Mean

1 Percentages and Raw Numbers

Table 25
Non Licensed Students' Expectations of Driving: Ordered According To Means

VARIABLES	MEANS*
When I can drive, it'll be easier for me to get to after-school activities, like sports practices and music lessons.	1.69
When I can drive, it'll be easier for me to get jobs, if I want them.	1.92
Life will be a lot more fun when I can drive.	2.15
Driving will be a lot of fun.	2.17
Being able to drive will give me a lot more freedom.	2.23
When I can drive, I'll be able to spend more time with my friends.	2.27
When I can drive, I'll feel more like an adult.	2.53
When I can drive, my parents will treat me more like an adult.	2.95
I'll be more popular when I can drive.	3.55

* Means are based on the following response categories:
Strongly Agree = 1; Agree = 2; Neutral = 3;
Disagree = 4; Strongly Disagree = 5

Tables 24 and 25 show that non-driving students strongly expect that when they get their license "it'll be easier for them to get to after-school activities, like sports practices and music lessons" (Mean = 1.69, Strongly Agree = 52.5%) and "it'll be easier for them to get part-time jobs" (Mean = 1.92; Strongly Agree = 40.6%). Other than the item, "I'll be more popular when I can drive" (Mean = 3.55; Disagreement = 51.8%), all the remaining expectations and/or anticipations about driving a car received considerable positive response (Means vary from 2.15 to 2.95).

LICENSED STUDENTS

Licensed Students' Reactions To Reality Of Driving

Licensed drivers were asked similar questions as non-driving students. The only difference was that the questions were designed to address the reality of driving rather than expectations of being able to drive. The responses to the licensed driver questions are tallied in Table 26.

Table 26
Licensed Students' Views On Driving

VARIABLES	RESPONSE CATEGORIES*						
	SA (1)	A (2)	N (3)	D (4)	SD (5)	Combined	$\bar{X}$
Now that I can drive, it's easier for me to get to after-school activities, like sports practices and music lessons.	48.4[1]	32.9	11.3	4.6	2.8	100	1.81
I spend more time with my friends now than I did before I could drive.	17.8	23.5	21.6	24.8	12.2	100	2.91
Life is a lot more fun now that I can drive.	30.9	33.5	22.8	10.2	2.7	100	2.20
Now that I can drive, it's easier for me to get part-time jobs, if I want them.	43.0	38.2	11.7	5.4	1.7	100	1.85
Being able to drive has given me a lot more freedom.	29.2	46.9	14.7	7.1	2.1	100	2.10
I'm more popular now that I can drive.	2.4	7.0	33.1	34.6	22.9	100	3.69

* SA = Strongly Agree; A = Agree; N = Neutral; D = Disagree; SD = Strongly Disagree
1 Percentage

According to licensed drivers, the ability to drive made it "easier for them to get to after-school activities like sports practices and music lessons" (SA + A = 80.2%) and it made it "easier for them to get part-time jobs" (SA + A = 81.2%). There was also significant agreement with other items. Little agreement was noted for the item, "I'm more popular now that I can drive." (9.4%.)

To establish any significant difference between the expectations of non-drivers and the reality of drivers, chi square analysis and t-tests were completed. For the chi square analyses, expected frequencies (E) were calculated by applying the percent of the non-licensed group response by category (item) to the total licensed group sample size. The

formula was $X^2 = \frac{(O - E)^2}{E}$. The average non-licensed group sample size for generating expected percentages by response category was 667. The average licensed group sample size was 718. Table 27 illustrates the chi square analysis.

Table 27
Chi Square Analysis Of Non-Licensed Students' Expectations Of Becoming Licensed And Licensed Students' Realities Of Being Licensed

ITEM	GROUP*	RESPONSE CATEGORIES SA (1)	A (2)	N (3)	DA (4)	SDA (5)		X^2	p
1. Will Be/Is Easier To Get To After-School Activities	N-D	376	232	78	15	16	(E)		
	L	347	236	81	33	20	(O)	25.0	.001
2. Will Be/Is Easier To Get Part-Time Jobs	N-D	292	259	112	42	13	(E)		
	L	309	274	84	39	12	(O)	11.5	.025
3. Life Will Be/Is More Fun	N-D	216	241	206	43	10	(E)		
	L	221	240	163	73	19	(O)	38.1	.001
4. Spend More Time With Friends	N-D	185	257	195	65	16	(E)		
	L	128	169	155	178	88	(O)	576.3	.001
5. Have More Freedom	N-D	188	275	175	63	18	(E)		
	L	210	337	106	51	15	(O)	46.5	.001
6. Be More Popular	N-D	26	56	265	239	133	(E)		
	L	17	50	238	249	165	(O)	14.6	.01
7. Got/Will Get Licence Soon As Possible After Sixteen	N-D	214	122	163	132	89	(E)		
	L	246	160	59	179	76	(O)	101.6	.001
8. Parents Treat Me Like An Adult	N-D	58	173	290	144	55	(E)		
	L	50	249	232	127	62	(O)	49.0	.001
9. Will/Do Feel More Like An Adult	N-D	128	231	233	99	26	(E)		
	L	141	274	191	79	32	(O)	22.3	.001
10. Will/Do Spend Less Time With Family	N-D	56	105	236	268	55	(E)		
	L	53	149	181	232	105	(O)	81.7	.001

* N-D = Non Driving Students; L = Licensed Students

Table 27 shows many significant findings. The most significant is that although 442 non licensed students believe they will spend more time with their friends once they learn to drive, only 297 licensed students agreed that since they learnt to drive, they do in fact spend more time with their friends. The obtained $X^2 = 576.3$, d.f. = 4 was highly significant at the .001 level. A more stringent t-test on the unadjusted samples provided a critical value of 9.61 (p less than .001).

Correspondingly, licensed drivers tend to spend less time with their families than non-licensed students expect to once they learn to drive. The obtained $X^2 = 81.7$, d.f. = 4 was highly significant at the .001 level.

The difference between experienced drivers being treated like adults and non-driving students expecting to be treated like adults once they can drive is highly significant at the .001 level of probability. The obtained X^2 was 49.0. The expectation of non-drivers that parents will treat them more like adults once they get their license holds true, based on licensed students' responses.

Closely related, is the finding that feeling like an adult is a product of driving. In fact, more experienced drivers feel like adults than non-drivers expect to feel after learning to drive. The obtained X^2 of 22.3, d.f. = 4 was highly significant at the .001 level of probability.

The issue of freedom and driving produced significant differences between expectation and reality. Significantly more licensed students answered that they have more freedom because of a license than non-driving students expect or anticipate to have, once they learn to drive. The obtained chi square was 46.5. Similarly, more licensed students agreed that life is more fun after a license than non-driving students anticipate life to be, after learning to drive ($X^2 = 38.1$, d.f. = 4, p less than .001). Less licensed students considered themselves to be more popular after receiving a license than non-driving students anticipate to be once they learn to drive ($X^2 = 14.6$, d.f. = 4, p less than .01).

A look at the practical elements of licensing reveals significant differences between licensed and non-driving students. For example, less licensed students agreed that it is easier for them to get to after-school activities than unlicensed students anticipate once they learn to drive. The obtained $X^2 = 25.0$, d.f. = 4 was highly significant at the .001 level of significance. However, more licensed students agreed that it was easier to get part-time jobs after receiving a license than unlicensed students expect it to be. However, the difference was not as high as in other items with a X^2 of 11.5, d.f. = 4 at the .05 level of significance.

Of interest is that more students received their license soon after their sixteenth birthday than unlicensed students anticipated once they turn sixteen years old ($X^2 = 101.6$, d.f. = 4, p less than .001). It appears that once students become sixteen years old the commitment to receive a driver's license increases.

Reported Driving Behaviour By Licensed Students

To obtain a more precise picture of licensed students' driving patterns, a series of appropriate items was developed. Table 28 outlines the items and tabulates the responses.

Table 28
Licensed Students Engagement In Certain Driving Behaviours

VARIABLES	RESPONSE CATEGORIES						
	Always (1)	Often (2)	Some-times (3)	Seldom (4)	Never (5)	Combined	$\bar{X}$
How often do you:							
- Drive to school	20.7[1]	15.0	16.9	25.6	21.8	100	3.13
- Drive to sports practices/ school activities	22.0	25.6	21.3	15.9	15.2	100	2.77
- Drive to parties	11.8	17.8	22.7	22.2	25.5	100	3.32
- Cruise around with my friends, me driving	9.0	18.9	27.9	27.0	17.2	100	3.25
- Cruise around with my friends, friend driving	8.4	23.0	30.9	24.0	13.8	100	3.12
- Drive around looking for parties	7.9	11.8	17.9	24.4	37.9	100	3.73
- Drive at night, Sunday to Thursday	13.3	29.1	30.9	19.3	7.5	100	2.79
- Drive at night on weekends	26.7	36.1	19.9	12.6	4.0	100	2.30
- Drive when I don't really have to	6.6	14.0	28.2	35.8	15.5	100	3.40
- Drive on the highway	29.7	38.8	20.0	8.0	3.6	100	2.17

[1] Percents

According to the items presented for student response, the driving activities in which most students engage are "driving on the highway" (Mean = 2.17), "driving at night on weekends" (Mean = 2.30), "driving to sports practices/school activities" (Mean = 2.77) and "driving at night, Sunday to Thursday" (Mean = 2.79). The findings may be used to support Jonah's (1984) statement, that young drivers have more accidents because their driving is performed more often during high risk times (at night) or at high risk locations (highways). For the respondents of this questionnaire, driving at night on weekends, on highways is/are usual occurrences. The least use of the car is for "driving around looking for parties" (Mean = 3.73) and "driving when students really do not have to" (Mean = 3.40). The remaining driving activities tend to cluster around the response category, "sometimes." If specific emphasis is warranted, it is interesting to note that "driving to parties" received a mean response of 3.32. However, approximately thirty percent (29.6%) of the licensed students answered that they either "always" or "often" drive to parties.

Overall, night driving is quite common amongst licensed young drivers. For example, 63.5% of the respondents answered that they either "always" or "often" drive at night on weekends and 42.4% answered they drive either "always" or "often" at night, Sunday to Thursday.

Another set of data was obtained on licensed young drivers' driving patterns concerning dangerous, questionable or illegal driving practices. The responses are tallied in Table 29.

Table 29
Licensed Students Engagement In
Questionable, Dangerous Or Illegal Driving Practices

VARIABLES	RESPONSE CATEGORIES						
	Always (1)	Often (2)	Some-times (3)	Seldom (4)	Never (5)	Combined	$\bar{X}$
Race other cars	3.8[1]	2.9	11.6	22.4	59.3	100	4.31
Drive after drinking alcohol	2.6	3.3	8.7	21.3	64.1	100	4.41
Occupy a car driven by someone who has been drinking alcohol	3.1	6.5	16.1	28.5	45.8	100	4.07
Drive with radio playing loudly	24.0	33.8	22.9	13.0	6.3	100	2.44
Burn rubber	4.8	4.3	14.3	22.0	54.6	100	4.17
Drive faster than the speed limit in the city	10.2	22.9	29.8	24.7	12.4	100	3.06
Drive faster than the speed limit on the highway	16.9	31.5	26.8	15.9	8.9	100	2.68
Drive with more passengers in the car than seat belts	3.8	7.1	17.9	38.9	32.3	100	3.89
Drive without wearing a seat belt	5.9	5.8	7.2	14.7	66.4	100	4.30
Put on smoke shows, do donuts	3.6	3.1	6.5	14.5	72.3	100	4.49
Just slow down at stop signs	5.5	9.0	18.5	36.2	30.8	100	3.78
Take corners quickly	5.3	13.1	29.5	35.6	16.5	100	3.45
Drive when I'm mad at something	5.4	7.9	31.5	33.6	21.6	100	3.58

[1] Percents

Of the questionable safe driving practises included in the questionnaire, the ones falling within the "often" to "sometimes" range were "driving with the radio playing loudly" (Mean = 2.44) and "driving faster than the speed limit on the highway" (Mean = 2.68). Between "sometimes" and "seldom" were the activities, "driving faster than the speed limit in the city" (Mean = 3.06), "taking corners too quickly" (Mean = 3.45), "driving when I'm mad at something" (Mean = 3.58), "just slowing down at stop signs" (Mean = 3.78), and "driving with more passengers in the car than seat belts" (Mean = 3.89).

The finding that most young drivers speed, especially on highways, parallels Soliday's (1974) and Wasielewski's (1984) conclusions that, based on lengthy observational studies, young drivers drive significantly faster than older drivers. As a result, they receive more speeding citations per kilometers travelled, than do older drivers.

Negative driving practises in which young drivers answered they "seldom" or "never" engage were, "burning rubber" (Mean = 4.17), "driving without a seat belt" (Mean = 4.30), "racing other cars" (Mean = 4.31), "driving after drinking alcohol" (Mean = 4.41) and "putting on smoke shows, doing donuts" (Mean = 4.49).

A chi square analysis of negative driving behaviours by **males** and **females** provided many significant group differences. For example, boys answered that they more often speed on city streets and highways than girls. The Chi squares were significant, (15.69 and 34.21 respectively, with .01 and .001 levels of probability). Similarly, significantly more boys than girls reported that they "always," "often" or "sometimes" burn rubber ($X^2 = 90.94$, d.f. = 4, p = .0000), "drive without wearing a seat belt" ($X^2 = 17.82$, d.f. = 4, p = .0013), "put on smoke shows, do donuts" ($X^2 = 84.82$, d.f. = 4, p = .0000), "take corners quickly" ($X^2 = 71.31$, d.f. = 4, p = .0000) and "race other cars" ($X^2 = 51.13$, d.f. = 4, p = .0000).

Concerning drinking and driving, significantly more boys than girls answered that they "always," "often" or "sometimes" "drive after drinking alcohol" ($X^2 = 13.50$, d.f. = 4, p = .009). There was no significant difference between boys and girls concerning their responses to the item, "occupy a car driven by someone who has been drinking alcohol."

With respect to **general driving patterns**, significantly more boys than girls answered "always" and "often" to the activity, "drive around looking for parties" ($X^2 = 18.75$, d.f. = 4, p = .0009). All the other general driving activities such as driving at nights, on highways or city streets, cruising, driving to school or school activities, did not show significant differences between boys and girls.

Licensed Students' Views On Caution

Three items were included in the questionnaire to gauge licensed young drivers' views on caution. The answers are tabulated in Table 30.

Table 30
Licensed Students' Views On Caution

VARIABLES	RESPONSE CATEGORIES*						
	SA (1)	A (2)	N (3)	D (4)	SD (5)	Combined	$\bar{X}$
When I first started driving I was more cautious than I am now.	19.2[1]	36.6	16.1	19.3	8.8	100	2.62
Compared to most people I know, I'm a pretty cautious driver.	20.6	45.5	26.3	6.5	1.1	100	2.21
I don't like driving in areas I'm not familiar with.	8.8	25.7	21.5	33.2	10.9	100	3.12

* SA = Strongly Agree; A = Agree; N = Neutral; D = Disagree; SD = Strongly Disagree

1 Percents

Based on Table 30, the majority of licensed young drivers think they are pretty cautious. Fifty-six percent of the drivers also answered that they have become less cautious since they first started driving. This result supports Brown's (1982) conclusion, that novice drivers (i.e. 16-17) are somewhat cautious when driving, but after a couple of years. they become over confident about their skills and perhaps start to overextend themselves.

A chi square analysis between young male and young female licensed drivers showed no significant differences between group responses (p less than .05).

Licensed Students' Views On Parents Vis-A-Vis Driving Behaviour

Data on this topic are analyzed in Table 31. They are based on three items on the questionnaire.

Table 31
Licensed Students' Views On Parent-Related Concerns About Young Drivers' Behaviours

VARIABLES	RESPONSE CATEGORIES*						
	SA (1)	A (2)	N (3)	D (4)	SD (5)	Combined	$\bar{X}$
My parents would be upset if they would see the way I drive when I'm with my friends.	5.0[1]	10.0	17.2	40.1	27.6	100	3.75
My parents would be upset if I got caught speeding.	19.1	32.4	19.3	20.6	8.6	100	2.67
My parents don't like me to go out and just drive around.	20.7	31.0	18.4	20.7	9.2	100	2.67

* SA = Strongly Agree; A = Agree; N = Neutral; D = Disagree; SD = Strongly Disagree

1 Percents

Just over half of the drivers (51.5%) agreed that their parents would be upset if they were caught speeding. Yet, Table 29 shows that 75.2% of young drivers speed on the highway on an "always," 'often" or "sometimes basis," while 62.9% do the same on city streets. Also, 51.7% of the young drivers answered that their parents don't like them to go out and just drive around.

SUMMARY OF THE FINDINGS

A report this size includes too many findings to highlight each one precisely. The more strategic and relevant findings are outlined below.

All Students: Weekend Activities

1. The weekend activities in which the majority of students participate on an "always," "often" or "sometimes" basis are: visiting friends (84.8%), dating (72.4%), attending parties (68.0%), playing sports (65.5%), hosting friends (69.7%) and driving around with friends (65.5%).
2. More grade eleven (45.0%) and twelve (44.0%) students than grade ten students (36.6%) attend parties regularly.
3. More grade eleven students (41.3%) than grade ten (37.5%) or grade twelve students (29.9%) drive around with their friends on weekends.
4. "Hanging around public places" is a regular weekend activity for 31.4% of grade ten students.
5. About half of the grade twelve students (51.6%) reported that they regularly work at part-time jobs on weekends.
6. More grade ten students (64.3%) visit friends than grade eleven (56.9%) or grade twelve students (53.9%).
7. Having friends over was most predominant for grade ten students.
8. By gender, on a regular basis, girls, more often than boys, go to movies, stay at home with their families, have friends over to their house, stay home by themselves and do homework, whereas boys, more than girls, go to parties and concerts, play sports and work at part time jobs.

All Students: Lifestyle and Alcohol

9. The majority of students agreed that it is easy for people their age to get alcohol (83.0%) and that drinking alcohol is common for most teenagers in the community (86.0%).
10. The majority of students agreed that their friends drink alcohol (69.9%) and that young people in the community go to a lot of parties (82.6%).
11. About one third of the students (34.8%) answered that their parents would be upset if they thought the students went to parties where people were drinking alcohol.
12. Over half of the students (57.9%) agreed that there is not much for young people to do in their communities.

13. The majority of students answered that if they had too much to drink they would not drive, but rather they would get home some other way (88.2%).
14. Getting alcohol is easy for people in grade twelve (90.2%), grade eleven (83.1%) and grade ten (80.7%).
15. A breakdown by grade shows that "friends drinking alcohol" received agreement from 76% of grade twelve students and eleven students and 63% of grade ten students.
16. More grade twelve students (54.5%) than grade eleven (46.2%) and grade ten students (38.9%) and more girls (37.4%) than boys (20.7%) answered that their parents would be upset if they thought their students went to parties where people were drinking alcohol.

All Students: Lifestyle and General Risk-Taking Concepts

17. A minority of students agreed that young drivers take more chances than older drivers (36.2%), and that driving fast is exciting (43.7%).
18. Over half of the students disagreed that young people drive the way their friends want them to.
19. The majority of students disagreed that it is okay to drive when you are a little impaired (83.3%), and that some people drive more cautiously when they are impaired (60.5%).
20. More girls (89.0%) than boys (79.3%) did not think it is okay to drive if you are a little impaired.
21. More girls (65.6%) than boys (53.7%)did not believe that some people drive more cautiously when they are impaired.
22. More boys (61.2%) than girls (29.5%) answered that fast driving was exciting.

All Students: Lifestyle and Parent Issues

23. The majority of students agreed that parents should accept the fact that young people drink alcohol before they are legally allowed (69.6%).
24. More boys (74.6%) than girls (67.5%) believed parents should accept illegal drinking by young people.
25. Forty four percent of of the students did not think that their parents would be upset if students went to parties where people were drinking alcohol.
26. Forty five percent of the students agreed that their parents would be upset if they saw the way students' friends drive.
27. The majority of students disagreed with the statement that "parents should only let young drivers use the car for essential trips like sports and music lessons" (69.9%).

All Students: Legalities

28. The majority of students opposed lowering the legal driving age to 14 (68.4%) or raising the legal driving age to 18 (78.4%).
29. The majority of students opposed raising the legal drinking age to 21 (66.8%).

All Students: The Car

30. Most students did not believe that good gas mileage is the most important thing about a car (48.5%).
31. Most students did not believe that it is important to have a fast powerful car (53.9%).

All Students: On Driving

32. Based on student responses, driving is much more exciting than boring, somewhat more relaxing than exhausting, somewhat more unnecessary than necessary, much more difficult than easy, much more important than unimportant and much more pleasant than unpleasant.

All Students: Precise Risk-Taking Driving Concerns

33. Students believed it is safe to "drive in the daytime" (Mean:1.61), "drive with friends" (Mean:2.20) and "drive on the highway" (Mean:2.24).
34. Students (minus neutral responses) believed it is somewhat safe to "drive at night" (Mean:2.56) and "pass other cars" (Mean:2.75).
35. Students described "driving in the rain" (Mean:3.00), "driving during rush hour" (Mean:3.07) and "speeding on the highway" (Mean:3.09) as not being especially safe or dangerous.
36. Students answered that, "driving without a seat belt" (Mean:3.93), "speeding on residential streets" (Mean:3.94), "driving after drinking a few beers" (Mean:4.30) and "riding with a driver who had a few beers (Mean:4.38) were dangerous activities.
37. More boys than girls answered that "speeding on the highway" (boys: 31.4%; girls: 15.8%), "driving during rush hours" (boys: 11.8%; girls: 2.7%) and "passing other cars" (boys: 46.6%; girls: 36.9%) were safe.
38. "Driving after drinking a few beers" was considered safe by 10.3% of the boys and 1.8% of the girls.
39. "Riding with a driver who had a few beers" was considered safe by 8.5% of the boys and 1.7% of the girls.

Non-Driving Students: Expectations of Driving

40. Non-driving students strongly expect that when they can drive it will be easier for them "to get to after-school activities" (Mean:1.69) and "to get part-time jobs" (Mean:1.92).
41. Non-driving students do not expect to be more popular when they can drive (Mean:3.55).
42. Non-driving students generally expect that when they can drive "life will be a lot more fun" (Mean:2.15), "they will have a lot more freedom" (Mean:2.23) and "they will be able to spend more time with their friends" (Mean:2.27).

Non-Driving Students' Expectations of Driving Versus Licensed Students' Reality of Driving

43. Non-driving students' expectation that once they learn how to drive they "will spend more time with their friends" is significantly higher than licensed students' realities that after knowing how to drive "they spend more time with their friends" (X^2 = 576.3; p less than .001).
44. Licensed students spend significantly less time with family since they have learnt to drive a car than non-driving students expect to spend time with family once they learn to drive (X^2 = 81.7; p less than .001).
45. Licensed students are treated more like adults by parents than non-driving students expect to be treated by parents (X^2 = 49.0; p less than .001).
46. Life is not as much fun for licensed drivers as non-driving students expect life to be after they learn how to drive (X^2 = 38.1; p less than .001).
47. Licensed students have significantly more freedom knowing how to drive a car than non-driving students expect to have after they learn how to drive (X^2 = 46.5; p less than .001).
48. More licensed students received their licenses as soon as possible after sixteen than non-driving students anticipate (X^2 = 101.6; p less than .001).

Licensed Students: Usual Driving Activities

49. The driving activities in which most students engage either always, often or sometimes are "driving on the highway" (Mean:2.17), "driving at night on weekends" (Mean:2.30), "driving to sports practises/school activities" (Mean:2.77) and "driving at night, Sunday to Thursday" (Mean:2.79).

50. The least use of the car (seldom and never), is for "driving around looking for parties" (Mean:3.73) and "driving when students really don't have to "(Mean:3.40).

Licensed Students: Questionable Driving Activities

51. The questionable driving practises in which most students either always, often or sometimes indulge are "driving with the radio playing loudly" (Mean:2.44) and "driving faster than the speed limit on the highway" (Mean:2.68).
52. Significantly more boys than girls reported that they always, often or sometimes "speed on city streets and highways," "drive without wearing seat belts," "put on smoke shows, do donuts," "take corners quickly" and "race other cars" (X^2 significant at p less than .001 for all cases).
53. Significantly more boys than girls reported they always or often "drive around looking for parties" and "drive after drinking alcohol" (X^2 significant at p less than .001 for all cases).

Licensed Students: Views on Caution

54. The majority of young drivers believe they are pretty cautious drivers (66.1%).

Licensed Students: Parents

55. The majority of young drivers disagreed that their parents would be upset if they saw how young drivers drive when they are with friends (67.7%).
56. Just over half of the young drivers agreed that their parents would be upset if young drivers were caught for speeding (51.5%) and they agreed that their parents do not like them to go and just drive around (51.8%).

RECOMMENDATIONS FOR PROGRAM DEVELOPMENT

Based on the findings several broad areas appear fruitful for young driver-oriented programs. They are:

1. Since girls are more safety conscious, and more conservative risk-takers than boys, and since they are major influencers of boys' maturity, they could be a prime focus for traffic safety programs addressing boys' risk-taking behaviours.
2. Parents could be educated apart from and/or a part of young peoples' traffic safety education.
3. Non-driving or unlicenced students could be a program focus with respect to the lack of congruency between their expectations of driving and the reality of driving.
4. A traffic safety program could be developed which stresses students' views and actions of safe driving behaviours and the real dangers of these behaviours.
5. A traffic safety program could be developed which features students' perceptions of safe driving and their engagements in driving behaviours considered to be dangerous.

DISCUSSION OF THE FINDINGS AND RECOMMENDATIONS

After a review of the study findings, it became obvious that there are significant differences between boys and girls with respect to attitudes towards driving. For example, boys tend to be greater risk-takers and participate in more unsafe driving circumstances and behaviours than do girls. Boys indicated that they, more than girls, go to parties, believe it is all right to drive while being a little impaired, believe parents should accept illegal drinking by young people, speed on city streets and highways, drive without wearing seat belts and drive around looking for parties. It would seem reasonable that innovative traffic safety programs should more clearly be directed at boys with the use of girls as positive examples or reinforcements.

So often debates rage among educators, laymen and parents about the role of parents and teenage behaviour. Findings in the study show that only about one third of the students believe that their parents would be upset if their teenage offspring went to parties where people were drinking alcohol. Over eighty percent of the young people attend "a lot" of parties. Surprisingly, more grade twelve students than grade eleven and ten students thought that their parents would be upset if they attended drinking parties. Yet, it must be assumed that a number of grade twelve students are of legal drinking age.

Further, only forty-five percent of the students believed that their parents would be upset if they saw how students' friends drive. This could mean that friends drive so safely that parents had no reason to be upset, parents have no knowledge of students' friends driving behaviours or parents do not care enough to be upset. Again, grade twelve students' parents tend to be more upset than grade eleven and ten students' fathers and mothers.

Based on parental concern, it would make sense to focus traffic safety attention onto grade ten and eleven students and parents. If one assumes that parents can and do influence "young" teenage behavior, educating this group of parents may be a reasonable program choice.

Of further interest to the researcher is the comparison of non-driving students' expectations of driving and licensed students' realities of driving. It appears that the reality of driving, pertaining to spending more time with friends, ease of finding part-time jobs, enjoying life, being personally more popular and spending less time with family do not match young peoples' expectations.

On the other hand, the benefits of driving exceed expectations in such areas as: students feeling and being treated more like adults because

of their abilities to drive, and having more individual freedom. Also, it appears that students tend to receive their driver licenses earlier than they originally anticipated.

Such findings may again provide fertile ground for program development. The fact that the reality of driving is not as positive as the expectations non-driving students have of driving can be explored for education programs.

Finally, it may be fruitful to develop relevant and meaningful programs which address young drivers' participation in everyday/usual and unsafe/questionable driving behaviours. For example, it seems that most young drivers "often" drive on the highway on weekends. Furthermore, they tend to have the radio playing loudly and break the speed limit. Overall, they perceive themselves to be cautious drivers whose parents may not be necessarily upset if they get caught for speeding or would definitely get upset if they saw how their offspring drove. These data are food for thought for any program development material.

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